

# FY2007



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## I. Introduction to Monitoring and Evaluation Report

The Kisatchie National Forest (KNF) annually monitors and evaluates programs and projects to determine whether they comply with management direction in the Revised Land and Resource Management Plan (Plan).

Monitoring and evaluation is an ongoing process, specifically designed to insure that Plan goals and objectives (Plan, pages 2-1 to 2-7) are being achieved; standards and guidelines (S&G's) are being properly implemented; and environmental effects are occurring as predicted. It also indicates whether the application of management area prescriptions is responding to public issues as well as management concerns; and if the costs of implementing the Plan are on target. The evaluation of monitoring results allows the Forest Supervisor to initiate action to improve compliance with management direction where needed, improve cost effectiveness, and determine if any amendments to the Plan are needed to improve resource management.

Monitoring is conducted by field reviews of projects and by inventory and survey work conducted by Forest Service resource specialists, Forest Service research scientists, universities, State resource agencies, and other cooperators.

This Monitoring and Evaluation Report is structured to correspond to the monitoring items listed in Chapter 5, Monitoring and Evaluation, of the Forest Plan. These items were developed based on the revised Plan's desired future conditions, goals and objectives, and standards and guidelines. Each monitoring item considered in this report references the corresponding monitoring item from Table 5-1 of the Plan.

This year's Report documents monitoring results for FY2007 (and some FY2006) activities and shows recommendations for FY2008. This Report follows the 5-Year Review (or Comprehensive Evaluation Report (CER)), done in FY2007 for the Revised Forest Plan. The 5-Year Review included monitoring results and recommendations compiled for the first six years of Plan implementation.

This report includes the implementation status of the previous monitoring recommendations in addition to the detailed results and action plan for this year's report. The next page contains a certification statement from the Forest Supervisor indicating that she has evaluated the findings and recommended actions, and directs that the action plans developed to respond to the recommendations be implemented.

### Opportunity for comment:

If you have questions or comments regarding the accomplishments for fiscal year 2007, please call or write and let us know. Telephone: 318-473-7160. Address: USDA Forest Service, 2500 Shreveport Highway, Pineville, LA 71360.

Certification:

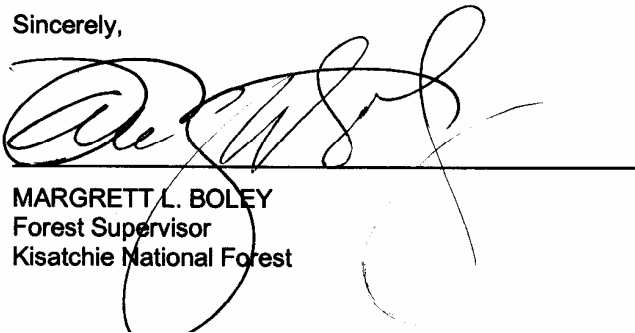
I have evaluated the monitoring results and recommended actions in this Report. I have directed that the action plans developed to respond to these recommendations be implemented according to the timeframes indicated, unless new information or changed resource conditions warrant otherwise. I have considered funding requirements in the budget necessary to implement these actions.

With these completed changes the Forest Plan is sufficient to guide the management of the Kisatchie National Forest for fiscal year 2008, unless ongoing monitoring and evaluation efforts identify further need for change.

Any amendments or revisions made to the current Forest Plan will be made using the appropriate National Environmental Policy Act procedures.

[Scan of original signature:]

Sincerely,



MARGRETT L. BOLEY  
Forest Supervisor  
Kisatchie National Forest

7/7/08  
Date

## II. Summary of M&E Results and Report Findings

- Landscape environmental documents focused on longleaf pine ecosystem restoration and RCW management objectives, including some longleaf restoration cuts and subsequent site preparation and planting to longleaf. Since thinnings were emphasized for RCW habitat improvement and fuels reduction, less was proposed for restoration of off-site species.
- The Revised Plan projected that 1,456 acres would receive final harvest annually for longleaf restoration. There is no indication that this target will be met in the future. Currently, Kisatchie has 125,958 acres in the longleaf pine plant community, compared to the Revised Plan's target of 263,000.
- There were no areas planted with shortleaf pine seedlings in FY2007. Currently, Kisatchie has 61,988 acres in the shortleaf pine/oak-hickory plant community, compared to the Revised Plan's target of 62,000 acres.
- Some loblolly pine was planted in an area damaged by wildfire in FY2005. Currently, Kisatchie has 336,360 acres in the mixed hardwood-loblolly pine plant community compared to the Revised Plan's long-term target of 27,800 acres.
- Early successional (0-10 years) pine habitat has diminished since the base year 1999 (the year the Kisatchie NF Revised Land and Resource Management Plan was published); mid-successional pine habitat has stayed approximately the same since 1999; and 81+ year-old pine habitat has increased since the base year.
- Mixed forest types and hardwood forest types: early successional habitat remains approximately the same as the base year; mid-successional habitat remains approximately the same as the base year; and older successional habitats have increased since the base year.
- All forest types, Forestwide: early successional habitat has decreased since the base year; mid-successional habitat remains approximately the same; and late successional habitat has increased since the base year.
- The Forest's prescribed burning program is the most utilized practice used for restoration of pre-settlement landscape conditions, which is proving to be very effective in improving and maintaining TESC species' habitat. Additionally, treatment of non-native invasive species is improving habitat for TESC species.
- Earthfruit (*Geocarpon mimum*) became listed by the USFWS as threatened and is the only threatened or endangered plant species that potentially exists on the Kisatchie National Forest. The USFWS advised that earthfruit has not been found on Kisatchie NF land, and that a comprehensive survey of likely glade habitat on the Kisatchie District in March 2007 resulted in no finds.
- The Kisatchie NF Forest RCW total indicates an increasing population trend.
- Louisiana pearlshell mussel populations appeared to be stable from recent surveys, increasing in some areas, decreasing in others. Activities from ORVs and urban sprawl continue to threaten the pearlshell's habitat.
- The prescribed burning goals were not accomplished due to insufficient burning windows. However, 95% of the target was met. The Forest accomplished 123,967 acres; of which 79,086 acres were dormant season and 44,881 acres were growing season burns.
- A regular 2-5 year burning cycle has greatly benefited the native longleaf/bluestem communities, as approximately 87 percent of the acres burned have been in the rolling

uplands and Kisatchie Sandstone Hills characterized by the longleaf plant community. The burning program has also been instrumental in restoring the longleaf pine back to areas where loblolly plantings had dominated.

- Wildland fire preparedness funding was still below the most efficient level. As a result, wildland fire losses were not being minimized due to the funding shortfall. The Forest still could not fill vacant firefighter positions.
  - Field reviews of prescribed burning activities were conducted on the Kisatchie Ranger District and the Calcasieu Ranger District in 2007. Appropriate S&G's were implemented in all compartments reviewed. Both reviews noted that soil cover was near 100 %, so they were rated as "exceeds compliance" in that review item. However, both the Calcasieu and the Kisatchie reviews noted a "minor departure" for firelines and water bars, respectively. All other review items were in full compliance.
  - No sediment delivery to streams was noted in any fire or timber monitoring activities.
  - Greys Creek was included in an every two month sampling schedule in 2007. This location was added to monitor for highway construction within Louisiana Pearlshell mussel habitat. That monitoring will cease at the end of calendar year 2008. Two samples showed high NTU's, but they were taken shortly after storms. Also, ATV operation in the stream through private property above the sample location probably was at least partly responsible for high turbidity readings.
  - Streams were surveyed for Louisiana pearlshell mussel host fish studies. Water quality was within acceptable norms (LDEQ), and population trends of MIS suggest that BMPs and SHPZs are adequately protecting the integrity and quality of watersheds within the Forest.
  - Infestations of hydrilla verticillata still threaten spawning habitat and fish population balance in Caney Lakes. The control structures on the lower lake have been repaired/replaced. The upper lake control structures are still unfunded and repair/replacement is critical to the lakes survival. Corney Lake is due a drawdown to maintain a healthy fish population balance and to allow decomposition of the "muck" on the lake floor.
  - Aquatic weeds are prevalent in Fullerton Lake. Boat access for applications of agricultural lime remains a problem in this waterbody, and aquatic weeds that are indicators of acidic conditions will continue to spread until this problem is resolved.
  - To decrease the need for continual stocking in a put-and-take fishery, catfish spawning cavities were designed, constructed and placed in Forest Service lakes and ponds, including newly constructed Gum Springs.
- 
- Populations of squirrels were stable. Deer populations are and have been considerably below the habitats' carrying capacity; herd densities are too low to provide adequate aesthetic enjoyment for non-consumptive users. Bobwhite population densities are low region-wide.
  - Meaningful Measures (INFRA) inventories were completed and data was updated to the corporate INFRA database. Critical standards are being met. Full compliance with all Meaningful Measures standards is not possible at current funding level.
  - The Forest continues to work on the Collins Camp issue. It has now evolved into a legislated sale authorized by House Rule 2186 whenever it gets passed. No right-of-ways were identified as needed or acquired in 2007. No private land was acquired in 2007.
  - In FY2007, 84,736 CCF (8.5 MMCF OR 42 MMBF) was actually sold. This is a slight decrease from 2006 (9.4 MMCF or 47 MMBF), but the sale program is expected to stabilize

somewhere around 90,000 CCF. If the funding were available, the program would continue to climb steadily until we begin to achieve the offer/sold levels outlined in the Forest Plan.

- The Secure Rural Schools and Community Self Determination Act has provided parishes with a steady income in lieu of taxes. FY2007 will be the last year for this to be in effect, and parishes will resume collecting 25% of receipts.
  - National Meaningful Measures standards for wilderness management have been completed. The Forest developed a 10 Year Strategy Plan to bring Kisatchie Hills Wilderness into compliance. A Wilderness Strategy Group was formed on the Forest.
  - Grazing resources are declining in acreage available due to the lack of management and lack of demand. Range allotments on the Catahoula Ranger District were closed.
  - One new well was drilled in 2007 on Outstanding Rights. A 60,000 acre seismic proposal was also initiated. Operating plans for these projects were reviewed for compliance with existing state and federal laws.
  - All compliance reviews and consultations pursuant to Section 106 of the National Historic Preservation Act (NHPA) were completed prior to agency decisions. FY2007 saw a decrease in request for surveys.
  - The Forest evaluated one potentially significant heritage site for eligibility to the National Register of Historic Places, and the number of backlogged sites has remained at 452. Given FY2007 funding and staffing levels, we were not able to satisfy compliance with Section 110 of the NHPA, requiring assessments of NRHP eligibility for all known cultural properties.
  - LSU completed partnership interpretive work on the Old LSU Trail. The trail was officially dedicated.
- 
- The 5-Year Review (or Comprehensive Evaluation Report (CER)) for the Revised LRMP, was completed in FY2007.
  - In April 2006, Amendment #6 (Breezy Hill Trail Project) was signed. It designated approximately 66 miles of single-track, multi-directional (two-way travel) motorized trail in response to user demand and the adverse environmental impacts of unmanaged recreational activities with ORVs on the Catahoula District. Expected in FY2008, Proposed Plan Amendment #7 (Kisatchie National Forest Travel Management Project), would prohibit motorized travel off designated routes Forestwide.
  - Research (SRS-4704, Utilization of Southern Forest Resources) in cooperation with Kisatchie National Forest and Forest Health Protection started plans for a study using biofuels to generate electricity. A BioMax 25 generator is to be erected at the Winn Ranger District that will use carbon products such as wood and paper to generate combustible gases that will be converted to electricity and used by the District office. This sustainability study will monitor the combustible gas content and kilowatt generation from different types of carbon sources.

### **III. Detailed M&E Results and Report Findings**

#### **1. BIODIVERSITY**

**Manage to restore or maintain the structure, composition, and processes of the four major landscape forest ecosystems known to occur on the Forest, and unique or under-represented inclusional communities embedd**



60 acres were planted with mixed hardwoods in an area devastated by a tornado.

Riparian plant communities continue to be maintained in concert with management practices. Typically riparian zones are excluded from silvicultural improvement activities, harvesting, thinning, and mid-story removal activities.

**FY2008 Recommended Actions:** Strive to increase the number of acres restored to longleaf pine. Continue to monitor sites for additional treatment needs. Thinning prescriptions within RCW HMAs should emphasize the needed longleaf stand composition. Post implementation field checks should be done on thinnings to ensure sufficient longleaf emphasis and evaluate species composition changes and update the FS Veg database for these changes.

Continue restoration treatments on shortleaf/hardwood sites where there is high priority for regeneration such as stands damaged by disease, insect or storms as well as those stands showing signs of decline.

Mixed hardwood-loblolly forest types exceed long-term desired future conditions by 308,560 acres. Prescribe regeneration cuts on off-site stands where there is a high priority for regeneration such as stands damaged by disease, insect or storms as well as those stands showing signs of decline.

Continue to monitor management practices being implemented within streamside and riparian area protection zones for compliance with the Forest Plan, through timber sale contract administration and field checks. Continue to consider selective thinning and hardwood planting treatments within riparian areas to encourage hardwood component.

**Provide for healthy populations of all existing native and desirable nonnative wildlife, fish, and plants by managing major forest ecosystems at the scale and distribution appropriate to maintain species viability. In the next 10 years, management indicator habitat objectives are as follows:**

- Longleaf pine, all stages: 121,000 acres.
- Shortleaf pine / oak-hickory, early stages: 0 acres.
- Shortleaf pine / oak-hickory, mid-late stages: 16,000 acres.
- Mixed hardwood-loblolly pine, early stages: 42,000 acres.
- Mixed hardwood-loblolly pine, mid-late stages: 252,000 acres.
- Riparian, small streams: 85,000 acres
- Riparian, large streams: 92,000 acres

Are management practices successfully expanding quality habitats for management indicators?  
**(E)**

**FY2007 Findings:** A botany MIS survey was initiated in 2002, and surveys were conducted at sites associated with RCW habitat. In 2004 data collection ceased with the vacancy of the Forest botanist position. A review of the collected data found that the methods being used had two problems. First, data collected by different observers was collected using slightly different methods. Secondly, there were very few occurrences of plant MIS within plots (Hyatt 2003). Consequently, current baseline data and survey methods have not proven effective for analyzing trends in some specific plant indicator species.

Based on inventoried forest-type acreages, Kisatchie NF meets or exceeds the Revised Plan's goal (first 10 years) of acreage provided in each landscape community except the mixed hardwood-loblolly pine early stages and the riparian, small and large streams, which are insufficient.

The following table compares planned and actual inv

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Landscape Community	Forest Plan 10-year goal <sup>1</sup> (acres)	FY2001 acres	FY2002 acres	FY2003 acres	FY2004 acres	FY2005 acres	FY2007 acres
Longleaf pine, all stages	121,000	127,415	120,483	122,503	119,245	125,661	125,415
Shortleaf pine / oak-hickory, early stages (<10 yrs)	0	1,633	2,897	626	1,149	1,182	999
Shortleaf pine / oak-hickory, mid-late stages	16,000	48,050	34,912	45,610	36,396	45,450	56,909
Mixed hardwood-loblolly pine, early stages (<10 yrs)	42,000	14,351	15,519	6,811	9,720	3,053	1,141
Mixed hardwood-loblolly pine, mid-late stages	252,000	261,024	247,710	259,284	253,922	267,186	241,372
Riparian, small streams	85,000 (no annual change)	85,000	85,000	85,000	85,000	85,000	85,000 <sup>2</sup>
Riparian, large streams	92,000 (no annual change)	92,000	92,000	92,000	92,000	92,000	92,000 <sup>3</sup>

<sup>1</sup> These figures represent an estimate of the Forest acreages for habitat after the first Plan period (10 years). Long-term restoration goals (Objective 2-1) are estimates for landscape communities over the 150-year "planning horizon".

<sup>2</sup> The actual inventoried acreage was 29,115 acres, based on existing small stream forest types.

<sup>3</sup> The actual inventoried acreage was 43,861 acres, based on existing large stream forest types.

Considering Kisatchie NF habitat types and the Forest Plan goals:

Successional Habitat (all Forest Types)	Forest Plan goal (acres)	FY2001 acres	FY2002 acres	FY2003 acres	FY2004 acres	FY2005 acres	FY2007 acres
Early (0-10 yrs)	>= 20,000	26,882	24,921	13,189	14,339	14,859	6,216
Middle (31-50 yrs)	>= 50,000	86,898	55,265	82,780	66,452	78,445	86,969
Late (71+ yrs)	>= 75,000	163,120	151,111	179,201	175,024	189,636	238,019

Kisatchie NF has a surplus of shortleaf pine/oak-hickory (mid-late stages) and a deficiency of mixed hardwood-loblolly pine (early stages). Other habitat types/successional stages are within Forest Plan standards.

**FY2008 Recommended Actions:** The management indicator species list should be modified to include more commonly occurring native plants that occupy a wider range of forest habitat types. Additionally, the survey protocol needs to be re-examined and possibly revised. It is recommended that successful botany MIS programs from other forests in R8 be considered as models, and that statisticians and vegetation ecologists participate in the review of a new Kisatchie NF MIS protocol. After consultation with Forest planners and the ecosystem conservation team leader, it was decided to delay any MIS survey until the planning changes in the new EMS system are made on Forest.

Continue to adhere to Revised Kisatchie NF Plan guidance.

Are the habitat objectives for selected management indicators providing for healthy populations of all existing native and desirable nonnative wildlife, fish, and plants? **(V)**

**FY2007 Findings:** It is likely that these objectives are being met mainly as a result of the effective Forest prescribed burning program; however, current baseline data and survey methods have not proven effective for analyzing trends in some specific plant indicator species. There is no statistical evidence showing that management objectives have been met.

Abundance trends of Kisatchie NF Terrestrial Management Indicator Species (total number of birds observed / total number of visits):

Management Indicator (terrestrial)	KNF 2006 Number <sup>4</sup>	KNF 1998-1999 Average <sup>1</sup>	KNF 2003-2005 Average <sup>5</sup>	KNF 2004-2006 Average <sup>2</sup>	Found in Habitat Types <sup>6</sup>
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<sup>4</sup> (Cumulative number of individuals observed per District / number of points surveyed per year per District) / 5 Districts.

<sup>5</sup> (Cumulative number of individuals observed per District / number of points surveyed per year per District) / 5 Districts) / the number of years in the range; <sup>a</sup> possible decreases from baseline years; <sup>b</sup> possible increases from baseline years; <sup>c</sup> this diminution is refuted by actual population counts which indicate an increasing population.



conservation team leader, it was decided to delay any MIS survey until the planning changes in the new EMS system are made on Forest.

Continue bird surveys on Kisatchie NF.

**F**

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Pine Forest Types	Successional Classes							
	0-10 years		11-30 years		31-80 years		81+ years	
Year:	2008	1999	2008	1999	2008	1999	2008	1999
Longleaf	4,076	13,614	15,588	10,179	83,700	95,690	21,740	4,162
Slash	44	618	2,614	7,392	34,827	31,273	37	11
Loblolly	980	38,880	84,300	81,214	159,005	147,014	27,627	15,382
Shortleaf	784	938	619	927	6,962	8,000	6,377	4,799
Sub-Total	5,884	54,050	103,121	99,712	284,494	281,977	55,781	24,354
Sub-Total %	1.3	11.7	23.0	21.7	63.3	61.3	12.4	5.3
Forestwide %	1.0	9.0	17.4	16.6	47.9	47.0	9.4	4.1
Mixed Forest Types	Successional Classes							
	0-10 years		11-30 years		31-80 years		81+ years	
Year:	2008	1999	2008	1999	2008	1999	2008	1999
Pine-Hwd	327	1,200	4,512	4,593	11,842	15,024	9,427	4,438
Hwd-Pine	0	371	1,275	2,958	16,991	25,071	16,738	8,229
Sub-Total	327	1,571	5,787	7,551	28,833	40,095	26,165	12,667
Sub-Total %	0.5	4.9	9.5	23.7	47.2	125.8	42.8	39.7
Forestwide %	0.1	0.3	1.0	1.3	4.9	6.7	4.4	2.1
Hardwood Forest Types	Successional Classes							
	0-10 years		11-30 years		31-80 years		81+ years	
Year:	2008	1999	2008	1999	2008	1999	2008	1999
Upland	5	522	2,676	2,752	18,062	24,809	13,367	5,480
Bottomland	0	311	1,531	2,664	20,396	29,917	27,170	12,045

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Sub-Total	5	833	4,207	5,416	38,458	54,726	40,537	17,525
Sub-Total %	0.0	1.1	5.1	6.9	46.2	69.7	48.7	22.3
Forestwide %	0.0	0.1	0.7	0.9	6.5	9.1	6.8	2.9
Forestwide	Successional Classes							
	0-10 years		11-30 years		31-80 years		81+ years	
Year:	2008	1999	2008	1999	2008	1999	2008	1999
Total Acres	6,216	56,454	113,116	112,679	351,785	376,798	122,482	54,546
Forestwide %	1.0	9.4	19.1	18.8	59.3	62.7	20.6	9.1

Early successional (0-10 years) pine habitat has diminished since the base year 1999 (the year the Kisatchie NF Revised Land and Resource Management Plan was published); mid-successional pine habitat has stayed approximately the same since 1999; and 81+ year-old pine habitat has increased since the base year. Mixed forest types and hardwood forest types: early successional habitat remains approximately the same as the base year; mid-successional habitat remains approximately the same as the base year; and older successional habitats have increased since the base year. All forest types, Forestwide: early successional habitat has decreased since the base year; mid-successional habitat remains approximately the same; and late successional habitat has increased since the base year.

**FY2008 Recommended Actions:** Continue the current prescribed burning program of 100,000 to 130,000 acres per year. Growing season burns are critical for successful gains in our restoration efforts. It is important to increase efforts to remove encroaching woody plants in the Winn district prairies and bogs throughout the Forest, as these habitats host many of our TESC species.

Continue to adhere to the land management practices described in the Kisatchie NF Revised Land and Resource Management Plan, which calls for relatively older timber stands.

Are red-cockaded woodpecker and Louisiana pearlshell mussel population trends responding positively to management strategies? **(M)**

**FY2007 Findings:**

**RCW Population Survey Results:**

RCW Populations	# Active Clusters					
	Recovery Goal	Year 2007 <sup>7</sup>	Year 2005	Year 2004	Year 2003	Year 2002
Catahoula	250	48	34	31	27	25

<sup>7</sup> Note that these numbers are current as of the date of this report, not during FY2007.





- Coastal plain upland mesic hardwood: 2,550 acres.
- Upland longleaf, woodland, and savanna: 45,350 acres.
- Southern wet pine forest, woodland, and savanna: 780 acres.
- Dry and xeric oak forest, woodland, and savanna: 120 acres.

Shortleaf pine/oak-hickory forest dominated patches: 13,500 acres.

- Coastal plain upland mesic hardwood: 1,290 acres.
- Dry and dry-mesic oak-pine forest: 11,630 acres.
- Dry and xeric oak forest, woodland, and savanna: 60 acres.
- Xeric pine and pine-oak forest and woodland: 50 acres.
- Seasonally wet oak-hardwood woodland: 350 acres.
- River floodplain hardwood forest: 120 acres.

Mixed hardwood-loblolly pine forest dominated patches: 6,100 acres.

- Coastal plain upland mesic hardwood: 700 acres.
- Seasonally wet oak-hardwood woodland: 300 acres.
- Dry and dry-mesic oak-pine forest: 4,650 acres.
- River floodplain hardwood forest: 450 acres.

Riparian forest dominated patches: 12,700 acres.

- Coastal plain upland mesic hardwood: 1,820 acres.
- River floodplain hardwood forest: 1,180 acres.
- Cypress-tupelo swamp forest: 1,400 acres.
- Eastern riverfront forest: 6,400 acres.
- Seasonally wet oak-hardwood woodland: 1,400 acres.
- Dry and dry-mesic oak-pine forest: 500 acres.

Are management practices designed to develop old-growth forest attributes being implemented?

**(U)**

**FY2007 Findings:** Currently there are very limited activities planned in old-growth patches. There are small acreages of thinning in existing plantations that fall within the patches. Actions meet Plan standards and guidelines for old-growth patches.

**FY2008 Recommended Actions:** Continue to review all project decisions with management practices within old-growth patches. Conduct sample field reviews after implementation.

Are the management practices successfully developing or maintaining forest attributes similar to those found in old-growth? **(E)**

**FY2007 Findings:** No activities have been completed at this time.

**FY2008 Recommended Actions:** The prescribed fire and commercial thinning occurring in some of the old growth patches in the uplands enhance the old-growth attributes and help mold appropriate overstory and understory composition. Actions meet Plan standards and guidelines for old-growth patches.

**Manage to protect or enhance the unique plant and animal communities, special habitat features, habitat linkages and corridors, and aquatic ecosystems associated with streamside habitat and riparian areas.**

Are streamside habitat protection zones and riparian area protection zones being delineated and managed as prescribed? **(U)**

**FY2007 Findings:** Management practices require NEPA documentation prior to being implemented. The application of harvesting techniques consistently included streamside habitat protection zones and riparian area protection zones with mitigation measures taken. At the present, no broad scale actions have been taken which might impact these areas.

**FY2008 Recommended Actions:** Every year, conduct silvicultural surveys and prepare documents addressing management practices where needed, on approximately ten percent of the Kisatchie National Forest ownership. Document the streamside habitat protection zones and actions taken to manage in and near these areas. Delineate these areas in the stand maps in GIS.

Are these zones successfully protecting or enhancing unique plant and animal communities, special habitat features, habitat linkages, and aquatic ecosystems? (E)

**FY2007 Findings:** Earthfruit (*Geocarpon minus*) is listed by the USFWS as threatened and is the only threatened or endangered plant species that exists on the Kisatchie National Forest. The USFWS advised that earthfruit has not been found on Kisatchie NF land, and that a comprehensive survey of likely glade habitat on the Kisatchie District in March 2007 resulted in no finds.

No significant changes in acres or site quality of habitat for sensitive and conservation plant species were found. Particular attention is directed at protecting bogs, wetlands and streams on the Forest. Completed project actions and associated mitigations meet at least 90% compliance with Forest Plan direction, project design, and NEPA decision direction.

**FY2008 Recommended Actions:** None.

Utilize prescribed fire in fire-dependent ecosystems, including Kisatchie Hills Wilderness, to maintain natural plant communities by varying the timing, frequency, and intensity of fire. Apply prescribed fire on 80,000–105,000 acres annually, with 10–20 percent of the area burned during the growing season. Focus growing season burning on longleaf pine landscapes.

Are the prescribed fire regimes being applied to all appropriate landscapes as prescribed, to maintain fire-dependent ecosystems? (I)

**FY2007 Findings:** The prescribed burning goals were not accomplished due to insufficient burning windows. However, 95% of the target was met. The Forest accomplished 123,967 acres; of which 79,086 acres were dormant season and 44,881 acres were growing season burns. Prescribed burning occurred in the following landtype associations (LTAs):

<u>LTA</u>	<u>Dormant Season Acres</u>	<u>Growing Season Acres</u>
1	40,868	16,628
2	8,368	18,879
3	3,852	2,307
4	1,833	407
5	13,996	2,550
6	6,229	4,110
7	380	0
8	204	0

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9	3356	0
Total	79,086	44,881

**FY2008 Recommended Actions:** The Forest should continue to monitor the weather and take advantage of every burning opportunity. Strive to maximize the implementation of growing season burns on longleaf pine plant community landscapes. The Forest will have two Regional Fuels Helicopters to increase the production and reduce the cost of CWN helicopters.

[REDACTED]

The implementation of standards and guidelines for smoke management activities were reviewed on the Kisatchie NF. There is a need to model and monitor particulate matter concentrations in the air within the sensitive communities adjacent to and within the boundaries of the National Forest before, during, and after prescribed burning operations.

**FY2008 Recommended Actions:** Review burn plans to evaluate how Louisiana Smoke Management Guidelines are being followed during reviews of soil, water and air standards and guidelines (Best Management Practices) and report findings. Develop a protocol to monitor particulate matter concentrations in the air within the sensitive communities adjacent to and within the boundaries of the National Forest before, during, and after prescribed burning operations. The first part would be to model the production, dispersion, and transport of PM<sub>2.5</sub> emissions, and potential impacts of those emissions on local communities. The second part is real-time, localized, particulate matter monitoring using portable samplers. The particulate samplers would be placed at strategic locations within or near smoke sensitive areas identified in the burn plan. Coordinate with the Zone Air Specialist in Arkansas until a protocol is developed, modeling is accomplished, samplers are acquired, and monitoring is implemented.

Does air quality meet NAAQS and state standards? (E)

**FY2007 Findings:** All areas of the Kisatchie National Forest are in attainment of the National Ambient Air Quality Standards (NAAQS) including those for ozone. Monitoring data for ozone was continuously collected at the LDEQ air monitoring station located on the Catahoula Ranger District at the Bentley site in Grant Parish until the station was destroyed by fire in August 2005. The Bentley station will not be re-established in the foreseeable future.

The LDEQ has been monitoring particulate matter with a Federal Reference Method PM 2.5 monitor located in Alexandria (Rapides Parish) since 1999. PM 2.5 refers to particulate matter that has a diameter of 2.5 micrometers or less. The monitoring data indicates that the NAAQS for particulates is being met.

**FY2008 Recommended Actions:** Continue to coordinate with LDEQ Air Quality Dept. on monitoring.

**Provide a level of wildfire protection which emphasizes cost effective wildfire prevention and suppression while minimizing loss of resources.**

Is wildfire protection being provided in a cost effective manner? Are losses to wildfire being minimized? (I)

**FY2007 Findings:** Wildland fire preparedness funding was still below the most efficient level. As a result, wildland fire losses were not being minimized due to the funding shortfall. The Forest still could not fill vacant firefighter positions.

**FY2008 Recommended Actions:** Continue to request wildland fire preparedness funding at the 100% efficient level and staff accordingly.

Are resources identified in NFMAS being made available in accordance with budget funding levels? Are acres lost to wildfire within the range identified by NFMAS for the current budget level? (E)

**FY2007 Findings:** Resources identified in NFMAS are being made available in accordance with budget funding level. The Forest burned 705 acres in wildland fires in FY2007. The acceptable range in NFMAS was 2,108. However, it was an unusually dry year with severity being utilized. The Forest was within the acceptable range. The Forest had 52 statistical fires for 705 acres of Forest Service land.

**FY2008 Recommended Actions:** Manage for productive and healthy forest ecosystems by utilizing prescribed fire to prevent and minimize resource losses to wildland fires.

**Manage for productive and healthy forest ecosystems by utilizing comprehensive integrated approaches designed to prevent and minimize resource losses or damage due to insects and disease.**

Do management practices provide for correct site/species selection, reduce overstocked stands to optimum levels and insure prompt detection and control of insects and diseases? (I)

**FY2007 Findings:** There were approximately 75 acres planned for longleaf pine restoration and 4719 acres planned for RCW thinnings in FY2007 that manage for healthy forest ecosystems to reduce disease and insect losses and improve species site selection.

Over 3,000 acres of 1<sup>st</sup> thinnings specific to high hazard SPB stands were planned in Decision Notices signed in FY2007. The Kisatchie National Forest did not have any reported SPB spots during FY2007.

Prescribed burning on longleaf plantations continues to be prescribed and implemented to address brown-spot needle blight.

There has been no reported mortality from Annosus root disease.

There was decline noted in some shortleaf pine on the Winn R.D. Forest Health specialists attributed this to a root fungus (i.e. loblolly decline, littleleaf disease.). Forest management practices of on-site species regeneration and thinning will help reduce mortality.

**FY2008 Recommended Actions:** Continue to identify restoration and forest health needs through the inventory process.

Implement backlog of NEPA covered timber stand improvement treatments, including pre-commercial thinning and first thinnings at an increased rate while the aid of Forest Health funding opportunities are available.

Continue to monitor areas for shortleaf decline and bug spots through aerial surveillance flights.

Has management resulted in a decrease of susceptibility of southern pine beetle and other pests? Are pest incidents decreasing with applied integrated management? (E)

**FY2007 Findings:** Insect and disease population trends on the Kisatchie National Forest were stable and low in FY2006 and are predicted to be low through 2007.

**FY2008 Recommended Actions:** Continue to monitor for possible SPB attacks through aerial observations. Field check for increased mortality from Annosus root disease on thinned loblolly stands on high hazard sites.

### 3. WATERSHED CONDITIONS

**Maintain or improve the Forest's long-term soil productivity. This is accomplished through land management practices designed to meet requirements for minimizing soil erosion and compaction, by not exceeding allowable soil loss for any given soil, by revegetating disturbed areas, and by restoring degraded areas to a natural condition.**

Are management practices designed to minimize soil erosion, compaction and loss of soil productivity being applied? (I)

**FY2007 Findings:** Field reviews of prescribed burning activities were conducted on the Kisatchie Ranger District and the Calcasieu Ranger District on April 4 and March 27, respectively, in 2007. Appropriate S&G's were implemented in all compartments reviewed. Both reviews noted that soil cover was near 100 %, so they were rated as "exceeds compliance" in that review item.

The Kisatchie review noted a "minor departure" for water bars. The reviewers determined that there could have been more waterbars in the firelines, and there was one location where diverted storm water came back onto the fireline after having once been diverted off. All other review items were in full compliance.

The Calcasieu reviewers noted a minor departure for having a fireline in the stream filter strip, encroaching to within about 10 feet at one point. The dozer operator had freshened up an old fireline to reduce new line construction and associated soil damage, but the old line followed the boundary between the Forest and adjacent private property. There was no room to operate the dozer between the stream and the private property, so the fireline got too close to the creek.

No sediment was observed to have been delivered to any streams in spite of the minor departures. The use of natural barriers, roads, etc., as much as possible, minimized the length of fire lines on the burned areas. This minimizing of fire lines greatly reduced the amount of soil disturbance and consequent erosion. Bladed lines as opposed to plowed lines were constructed which reduced the potential for erosion. Permanent fire lines and water bars, which can be reused, are being constructed along private land. Training of the district fire and timber staff was conducted as a part of the reviews. The erosion control guidelines were discussed.

Soil quality monitoring was conducted utilizing proposed R8 soil monitoring protocol. Two proposed protocols were tested on the Forest as part of a Regional protocol test application.

One method looks almost exclusively at evidences of compaction. Where tested on the Calcasieu and Kisatchie Districts, the method indicated minor compaction within and outside harvest areas.

The second method looks at the extent of logging equipment travel over a harvest area and at per cent soil disturbance. The area tested showed travel area by equipment in excess of 15%, but soil disturbance well under 5%. Logging equipment travel area exceeded 15% in the sale area reviewed due simply to the fact that timber was removed by a harvester that reaches out to each tree harvested. The harvester approached trees for harvest, severed the stems at the base, stripped the limbs from the stems, cut the stems to length, and deposited the slash in the travel way of the harvester before it moved to the next stems. The timber forwarder followed the same path, also driving over the deposited slash laid down by the harvester. In the professional opinion of the Forest Soil/Water/Air Program Manager, there was no soil damage or productivity loss indicated by either method of soil quality monitoring.

**FY2008 Recommended Actions:** Continue monitoring prescribed fire management and timber management activities for implementation of Standards and Guidelines.

Is allowable soil loss being exceeded? Are disturbed and degraded areas being restored and revegetated to a natural condition? (E)

**FY2007 Findings:** Watershed improvement work is ongoing. All targets for watershed improvement work were accomplished in FY2007 with watershed improvement funding. Projects were located on all districts and all included erosion and sediment control measures.

A new protocol for soil quality monitoring is being considered in R8, and soil loss is not part of that monitoring protocol. So there was no soil loss monitoring conducted in FY2007.

**FY2008 Recommended Actions:** Continue to restore and revegetate disturbed areas.

How do timber management practices, especially timber harvesting and consequent compaction, affect soil productivity? (V)

**FY2007 Findings:** Preliminary findings from the Long Term Soil Productivity Study being conducted by the Southern Research Station indicate that when sites located on several soil types with a severe compaction hazard rating were subjected to experimental compaction, bulk densities recovered to near original undisturbed levels within ten years and pine productivity was unaffected.

Preliminary results also indicate that soil productivity may be decreased by slash removal or increased by phosphorus fertilization on phosphorus-deficient sites. In general, less productive sites are more susceptible to detrimental harvesting impacts than highly productive sites. The Long Term Soil Productivity Study is a national study being conducted to evaluate the effects of various timber management practices on the productivity of soil. Research plots are located at various locations around the U. S. including the Catahoula and Calcasieu Ranger Districts.

**FY2008 Recommended Actions:** Continue to coordinate with and assist the Southern Research Station with the Long Term Soil Productivity Study.

**Maintain or improve the integrity of aquatic ecosystems to provide for high water quality, stream-channel stability, natural flow regimes, water yield, and aquatic resources by managing in accordance with the Clean Water Act and by meeting all state and federal water quality standards.**

Are management practices designed to minimize contamination, sedimentation, and maintain stream channel stability being applied? (I)

**FY2007 Findings:** Field reviews were conducted of prescribed burning activities on the Kisatchie and Calcasieu Ranger Districts as discussed earlier under Watershed Conditions. With the exceptions noted in that discussion, SHPZs were being protected per the Forest LMP.

Monitoring for implementation of Timber Removal S&G's was conducted on the Caney and Calcasieu Ranger Districts on February 16 and March 2, 2007, respectively. Reviewers determined that all applicable S&G's were implemented, and all review items were rated as in full compliance or better. Erosion control measures was rated as "exceeds full compliance" on one sale area during the Caney District review. The Forest Plan allows for certain level of management inside SHPZs and RAPZs, but the sale areas reviewed did not take opportunity for treatment during harvest. Good discussions concerning S&G implementation were had with personnel of both Districts.

No sediment delivery to streams was noted in any of the fire or timber monitoring activities.

**FY2008 Recommended Actions:** Continue to monitor prescribed burning and timber management activities for implementation of Standards and Guidelines.

Are state water quality standards and state anti-degradation policies being met? Is water quality being degraded? (E)

**FY2007 Findings:** The water quality of nine streams on the Kisatchie NF continued to be monitored quarterly in cooperation with the La. Dept. of Environmental Quality (LDEQ). The data is being incorporated into the State's Clean Water Act Sect. 305b Water Quality Inventory [www.deq.state.la.us/surveillance/wqdata/wqnsites.stm](http://www.deq.state.la.us/surveillance/wqdata/wqnsites.stm).

Streams / Site Numbers are: Cress Creek / 0556, Beaver Creek / 0570, Bayou Clear / 0554, Loving Creek / 0555, Long Branch / 0572, Castor Creek / 0573, Little Bayou Clear / 0574, Brown Creek / 0571, Saline Bayou / 0553. All monitored streams are habitat for the Louisiana Pearlshell mussel except for Saline Bayou, which is a National Scenic Stream.

An additional stream was included in an every two month sampling schedule on Greys Creek (stream # 3240) in 2007. This location was added to monitor for highway construction effects to Greys Creek, which is also Louisiana Pearlshell mussel habitat. That monitoring will cease at the end of calendar year 2008.

The monitoring is being done according to a cooperative arrangement with LDEQ under the Forest's Non-Point Source Pollution Control Memorandum of Agreement with the State. The measured parameters include suspended solids and turbidity. The monitoring data indicates that all these streams meet the criteria for designated uses, including propagation for fish and wildlife. Almost all samples from these streams have turbidity levels well below 25 nephelometric



turbidity units (NTU), which is the criterion for natural and scenic streams. Additional parameters being monitored are metals (arsenic, chromium, cadmium, copper, lead, mercury, and nickel), nutrients (carbon, phosphates, potassium, nitrogen, nitrites, and nitrates) and sulfates. The monitoring data indicate minimal or trace levels of some of these substances but no contamination that would affect fish or wildlife.

Two samples from Greys Creek have shown high NTU's, but they were taken shortly after storms, and ATV operation in the stream through private property above the sample location probably was at least partly responsible for high turbidity readings.

Bi-weekly testing of fecal coliform levels at Stuart Lake, Kincaid Lake and Caney Lake swim beaches indicated that water quality standards for protection of public health and safety were met.

**FY2008 Recommended Actions:** Continue to coordinate with LDEQ on monitoring the water quality of streams on the Kisatchie NF. Continue required monitoring of water quality of Kisatchie NF swim beaches.

**Manage perennial and intermittent streams as well as natural and man-made lakes, reservoirs, and ponds for native and desirable nonnative fish species and aquatic communities.**

Are lake predator-prey populations in balance? Are management practices sufficiently protecting stream and lake habitats? Are primary aquatic food chain organisms being impacted by siltation?

(I)

**FY2007 Findings:** Predator/prey populations across the Forest are sufficient for a sustainable recreational fishery.

The National Natchitoches Fish and Wildlife Service Fish Hatchery, in cooperation with the Louisiana Department of Wildlife and Fisheries Booker-Fowler Fish Hatchery, provide all fish stockings for Kisatchie National Forest.

Forest Service streams were surveyed for LPM host fish studies. Water quality was within acceptable norms (LDEQ), and population trends of MIS (see 2005 MIS report) suggest that BMPs and SHPZs are adequately protecting the integrity and quality of watersheds within the Forest.

Young-of-year and recruitment of all age classes provided evidence that sediment has not inhibited reproduction of fishes or altered habitat beyond natural conditions.

Blue Run Pond, Lower Caney Lake, the Longleaf Pond and Stuart Lake underwent renovation this past year.

**FY2008 Recommended Actions:** Establish size and creel limits on the Forest to ensure recruitment and sustainability of the resource. Continue to monitor and collect data.

Continue to monitor and assess (analyze and interpret data) the effectiveness of management strategies on the Forest concerning aquatic resources.

Continue to monitor and identify any future restoration projects, which may include renovation of older ponds when funds are available.

Are lake populations healthy? Are non-natives and / or generalist-omnivore natives affecting lake biomass and balance? Is lake habitat sufficient? (E)

**FY2007 Findings:** Relative weights of largemouth bass indicated healthy populations and adequate forage bases and there was no evidence of primary or secondary infections and disease.



Supplemental stockings of Florida strain largemouth bass occurred across the Forest to maintain and enhance recreational fishing success.

Stocking of bass and bream also occurred in newly constructed/renovated Blue Run Pond.

Presence of forage fish and omnivores were evaluated in Forest lakes. Infestations of *hydrilla verticillata* still threaten spawning habitat and fish population balance in Caney Lakes. The control structures on the lower lake have been repaired/replaced. The upper lake control structures are still unfunded and repair/replacement is critical to the lakes survival.

Corney Lake is due a drawdown to maintain a healthy fish population balance and to allow decomposition of the "muck" on the benthos layer, or lake floor.

Aquatic weeds are prevalent in Fullerton Lake, the site of one of the earliest sawmills in Louisiana. Boat access for applications of agricultural lime remains a problem in this waterbody, and aquatic weeds that are indicators of acidic conditions will continue to spread until this problem is resolved.

Channel catfish fingerlings were stocked in Corney Lake (4,024) and Lower Caney Lake (1,144) to improve the sport fishery and fill a habitat niche that would otherwise be filled by undesirable species (ex. bullheads).

To decrease the need for continual stocking in a put-and-take fishery, catfish spawning cavities were designed, constructed and placed in Forest Service lakes and ponds, including newly constructed Gum Springs.

Water quality on Forest Service lakes was within the norms associated with infertile oligotrophic systems of the sandy coastal plains. Restoration projects were prescribed to maintain and enhance lake productivity and habitat. Applications of lime and fertilizer were applied to increase and maintain pH and alkalinity, increase primary production; therefore increasing survival rates of young-of-year fish, and suppressing unwanted aquatic weeds.

**FY2008 Recommended Actions:** Stock catfish fingerlings when available and necessary. Monitor the success and utilization of the spawning cavities placed in Forest Service lakes. Continue restoration and enhancement projects.

#### 4. OUTDOOR RECREATION OPPORTUNITIES

**Provide habitat for game and fish populations. Population levels will be measured by the Louisiana Department of Wildlife and Fisheries and agreed upon by the Forest.**

Are management practices successfully expanding quality habitats for game and fish species?

**(E)**

**FY2007 Findings:** Planned and actual acreage by successional habitat are shown below. The Forest has a shortage of early successional habitat and is within the Plan guidelines for mid- and late successional habitats.

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Successional Habitat (all Forest Types) <sup>8</sup>	Forest Plan goal (acres)	FY2002 acres	FY2003 acres	FY2004 acres	FY2005 acres	FY2008 acres
Early (0-10 yrs)	>= 20,000	24,921	13,189	14,339	14,859	6,216
Middle (31-50 yrs)	>= 50,000	55,265	82,780	66,452	78,455	86,969
Late (71+ yrs)	>= 75,000	151,111	179,201	175,024	189,636	238,019

**FY2008 Recommended Actions:** Continue to adhere to Revised Plan guidance.

Are habitat objectives for selected demand species management indicators providing game and fish populations sufficient for quality recreational opportunities? **(V)**

**FY2007 Findings:**

Estimated population densities of select game species on Kisatchie NF are as follows:

White-Tailed Deer (acres/animal)		2002	2003	2004	2005	2007
	Catahoula District	90	110	100	140	140
	Evangeline District	90	120	100	200	200
	Kisatchie District	90	110	100	110	110
	Winn District	75	90	85	100	100
	Vernon District	75	75	75	75	75
	Caney District	50	50	50	50	50
Wild Turkey (acres/animal)		2002	2003	2004	2005	2007
	Catahoula District	200	200	200	200	200
	Evangeline District	300	300	300	300	300
	Kisatchie District	100	100	100	100	100
	Winn District	150	150	150	150	150
	Vernon District	250	250	250	250	250

<sup>8</sup> The monitoring items are the same as for T#28; however, the evaluation here applies to "... quality habitats for game and fish species." In T#28, the evaluation applies to "...quality habitats for management indicators."

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	Caney District	300	300	300	300	300
Fox Squirrel (acres/animal in upland hardwoods)		2002	2003	2004	2005	2007
	Catahoula District	5	5	5	5	5
	Evangeline District	5	5	5	5	5
	Kisatchie District	5	5	5	5	5
	Winn District	5	5	5	5	5
	Vernon District	5	5	5	5	5
	Caney District	5	5	5	5	5
Gray Squirrel (acres/animal in bottomland hardwood)		2002	2003	2004	2005	2007
	Catahoula District	3	3	3	3	3
	Evangeline District	3	3	3	3	3
	Kisatchie District	3	3	3	3	3
	Winn District	3	3	3	3	3
	Vernon District	3	3	3	3	3
	Caney District	3	3	3	3	3
Northern Bobwhite (acres/covey)		2002	2003	2004	2005	2007
	Catahoula District	1,800	1,800	1,800	1,800	1,800
	Evangeline District	1,800	1,800	1,800	1,800	1,800
	Kisatchie District	1,800	1,800	1,800	1,800	1,800
	Winn District	1,800	1,800	1,800	1,800	1,800
	Vernon District	1,800	1,800	1,200	1,800	1,800
	Caney District	1,800	1,800	1,800	1,800	1,800

Populations of squirrels were stable. Deer populations are and have been considerably below the habitats' carrying capacity; herd densities are too low to provide adequate aesthetic enjoyment for non-consumptive users. Catahoula and Evangeline deer numbers are based on the LSU deer abundance survey during late fall 2005. Bobwhite population densities are low region-wide.

**FY2008 Recommended Actions:** Attempt to implement hunting seasons comparable to those of Louisiana Department of Wildlife and Fisheries' Wildlife Management Areas with similar habitat in central and northern Louisiana.

Consider modifying this planning objective. The Louisiana Department of Wildlife and Fisheries have not and do not plan to measure population levels on the Forest (Note: this recommendation was also made in the 5-Year Review, done in FY2006).

**Protect, restore, maintain, acquire, and improve habitat on the Forest for waterfowl and wetland wildlife, as stated in the North American Waterfowl Management Plan.**

Are management practices designed to protect, restore, maintain, and improve waterfowl and wetland wildlife being implemented? (I)

**FY2007 Findings:** Kisatchie NF District personnel design and implement management activities according to NEPA standards. Kisatchie NF Ecosystem Conservation staff provides assistance as requested.

**FY2008 Recommended Actions:** Continue to adhere to Kisatchie NF Revised Land and Resource Management Plan guidance.

Are these management practices successfully providing for waterfowl and wetland wildlife? (E)

**FY2007 Findings:** In 2003, Kisatchie NF provided 48,483 acres of riparian/bottomland habitat for waterfowl and wetland wildlife. In 2004, Kisatchie NF provided 45,509 acres (525 stands) of riparian/bottomland habitat for waterfowl and wetland wildlife. In 2005, Kisatchie NF provided 49,336 acres (559 stands) of riparian/bottomland habitat for waterfowl and wetland wildlife. In 2008, Kisatchie NF provided 49,097 acres (554 stands) of riparian/bottomland habitat for waterfowl and wetland wildlife.

**FY2008 Recommended Actions:** Continue to adhere to Revised Kisatchie NF Plan guidance.

**Manage the Forest to create and maintain landscapes having high scenic diversity, harmony, and unity for the benefit of society through the application of the Scenery Management System, and consistent with assigned scenic integrity objectives (SIO). The SIOs are as follows:**

- Very high: 8,699 acres.
- High: 93,980 acres.
- Medium: 89,155 acres.
- Low: 415,020 acres.
- Very low: 1,278 acres.

Is the Forest being managed in accordance with the assigned SIOs? (I)

**FY2007 Findings:** Consultations with district staff reveal recent management actions are in compliance the SIOs.

**FY2008 Recommended Actions:** Continue to review proposed projects for SIO compliance. Work with Districts to implement new SMS guidelines. Encourage better participation on ID Team meetings.

**Provide visitors the opportunity to pursue a wide variety of developed and dispersed recreation activities, with a minimum amount of regulation, consistent with the**

assigned recreation opportunity spectrum (ROS) class. The Forest's ROS class objectives are as follows:

- Primitive: 8,700 acres.
- Semi-primitive non-motorized: 57,269 acres.
- Semi-primitive motorized: 89,963 acres.
- Roaded natural-appearing: 217,152 acres.
- Roaded natural modified: 191,671 acres.
- Rural: 6,162 acres.

Has class eligibility shifted significantly? (E)

**FY2007 Findings:** Comparisons were not made due to continued staffing limitations. However, shifts in ROS class eligibility are not likely to have occurred because only minor road construction or decommissioning was planned and accomplished. ROS class eligibility changes are dependant, primarily, on changes in road density and OHV management status. Some changes may occur in the next year due to new travel management designation implementation.

**FY2008 Recommended Actions:** Monitor for changes as the new travel management rule is implemented.

**Develop, maintain, and protect existing and potential developed and dispersed recreation sites and trails consistent with public use and demand through construction, operation, maintenance, and rehabilitation activities.**

How satisfied are our recreation customers? Are recreation resources managed in a manner that is responsive to public recreation needs yet as cost effective as possible, in accordance with the negotiated recreation program of work based on Meaningful Measures standards? (I)

**FY2007 Findings:** Meaningful Measures (INFRA) inventories were completed and data was updated to the corporate INFRA database. Critical standards are being met. Full compliance with all Meaningful Measures standards is not possible at current funding level. Customer service response has continued to improve with the assignment of a Customer Service Representative. The Customer Service Representative receives requests, questions, or complaints. She then answers or refers to appropriate district or source for best response. A Program Specialist was added to the staff to assist with INFRA database and inventory needs.

**FY2008 Recommended Actions:** Continue the annual update of INFRA data. Continue management of the recreation program using the IWEB INFRA system and the Recreation Realignment Process. Implement the Excellence by Design process for all recreation and trails projects to ensure design compliance, feasibility and good customer service. Continue to improve customer service through the Customer Service Representative.

## 5. INFRASTRUCTURE

**Manage the transportation system to ensure that any roads constructed are designed according to standards appropriate to the planned uses.**

Is the transportation facility serviceable by the intended user? (E)

**FY2007 Findings:** During FY2004 through FY2007, 1.78 miles of local roads were reconstructed or constructed. Of this total, 1.78 miles were reviewed. Of the roads reviewed, 100.0% of the road length was observed to be serviceable by the intended user and required no significant increase in the level or frequency of maintenance.

Functional Class	FY2004		FY2005		FY2006		FY2007		Totals
	Local	Collector	Local	Collector	Local	Collector	Local	Collector	
Road Reconstruction/Construction (miles)	0.22	0.0	0.97	0.0	0.28	0.0	0.22	0.09	1.78
Roads Monitored (miles)	0.22	0.0	0.97	0.0	0.28	0.0	0.22	0.09	1.78
Roads requiring increased level/frequency of maintenance or not serviceable by use (miles)	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00

**FY2008 Recommended Actions:** Continue use of appropriate design standards for road reconstruction and construction. Continue monitoring road condition and use.

## 6. HUMAN INFLUENCES

**Manage national forest lands in an efficient manner to provide for the future needs of society by pursuing opportunities to make land ownership adjustments that improve management effectiveness and enhance public benefits through land consolidation; acquiring rights-of-way that facilitate efficient management; issuing land use authorizations necessary to meet public and private needs only when no viable alternative to long-term commitments on Forest land exists; and establishing and maintaining all landline boundaries.**

Are non-federal lands being acquired to enhance public benefits and improve management effectiveness? Are acquired rights-of-way achieving better Forest management? Are land use authorizations being issued only after all other alternatives are explored to provide goods and services? How well are landline boundaries being established, maintained, and protected from obliteration? (I)

**FY2007 Findings:** The Forest continues to work on the Collins Camp issue. It has now evolved into a legislated sale authorized by House Rule 2186 whenever it gets passed. No right-of-ways were identified as needed or acquired in 2007. No private land was acquired in 2007.

We evaluated over 50 applications for a variety of special uses including roads, utilities, recreation events and group use. 20 Special Use Permits were granted or renewed in 2007 after private occupancy alternatives were examined. 10 permits were closed either because the uses were no longer needed or the term of use expired. A total of 430 permits are authorized on the Forest.

**FY2008 Recommended Actions:** The Forest is participating in a significant effort with the region to digitize our title records. Continue to manage and monitor the lands program to the level that funding will allow.

Are newly acquired lands compatible with management practices in the Management Area where they are located? Are encroachments discouraged by well-defined property lines? (E)

**FY2007 Findings:** 147 miles of landline was maintained to standard.

**FY2008 Recommended Actions:** Increase funding to adequately maintain landlines.

**Provide for long-term sustainable production of commodities for economies, local community stability, and people.**

How does the flow of commodity outputs to local economies and people compare with the Forest Plan projections? (I)

**FY2007 Findings:** Harvest levels in FY2007 were 66,463 CCF (6.6 MMCF or 33.5 MMBF). Prices and markets continue to drive the demand for wood products. The future demand is uncertain, as global demand and supply play themselves out.

In FY2007, 84,736 CCF (8.5 MMCF OR 42 MMBF) was actually sold. This is a slight decrease from 2006 (9.4 MMCF or 47 MMBF), but the sale program is expected to stabilize somewhere around 90,000 CCF. If the funding were available, the program would continue to climb steadily until we begin to achieve the offer/sold levels outlined in the Forest Plan.

The Secure Rural Schools and Community Self Determination Act, passed in 2000 and extended in 2007, has provided parishes with a steady income in lieu of taxes. This will be the last year for this to be in effect, and parishes will resume collecting 25% of receipts.

**FY2008 Recommended Actions:** Continue to monitor the situation.

**Assist local forest communities in diversifying and enhancing existing economies with an emphasis on the conservation of natural, cultural, and recreational resources of the Forest and the state.**

Are programs and opportunities for improving rural economies and social conditions being developed? (I)

**FY2007 Findings:** The Forest received no Economic Recovery (ER) grant proposals as funding has been cut.

**FY2008 Recommended Actions:** None.

Are programs and opportunities improving sustainable local economies and social conditions? (E)

**FY2007 Findings:** No, the program dollars have been cut.

**FY2008 Recommended Actions:** Continue emphasis on new communities and capacity-building projects that result in increased local job opportunities and local incomes.

**FY2008 Recommended Actions:** Continue to update and add information to the new database. Work with District personnel to determine needs and work towards solutions.

**Manage the Kisatchie Hills Wilderness to enhance and perpetuate wilderness as a resource. Avoid resource damage resulting from overuse.**

Is Kisatchie Hills Wilderness being managed to enhance and perpetuate wilderness values? Are natural processes allowed to operate freely? Is Forest Plan direction that would ensure the above being applied? (I)

**FY2007 Findings:** National Meaningful Measures standards for wilderness management have been completed. The Forest developed a 10 Year Strategy Plan to bring Kisatchie Hills Wilderness into compliance. A Wilderness Strategy Group was formed on the Forest.

**FY2008 Recommended Actions:** Strive to manage Kisatchie Hills Wilderness in compliance with the new national Wilderness Meaningful Measures Standards. Continue to promote the area and educate users. Continue working towards bringing the Kisatchie Hills Wilderness Area into compliance with standards by implementing the strategy that was developed for the Forest.

## 8. TIMBER

**Offer for competitive bid an average of 9.7 million cubic feet of timber sale volume on an annual basis for the first decade of the Plan.**

Is the Forest providing for competitive bid the average annual allowable sale quantity it projected for the first decade? (I)

**FY2007 Findings:** In FY2007, 84,736 CCF (8.5 MMCF OR 42 MMBF) was actually sold. Compared with 2006 (9.4 MMCF or 47 MMBF), this is within 10% of the average annual allowable sale quantity. The sale program is expected to stabilize somewhere around 90,000 CCF. If the funding were available, the program would continue to climb steadily until we begin to achieve the offer/sold levels outlined in the Forest Plan.

The Forest has project plans and EA's in progress to continue to maintain this level of sales.

**FY2008 Recommended Actions:** Continue to monitor the situation.

**Manage the Forest to achieve a mixture of desired future conditions using even-aged, two-aged, and uneven-aged silvicultural systems and regeneration methods; and a variety of manual, mechanical, prescribed fire, and herbicide vegetation management treatments. Apply the uneven-aged silvicultural system on a minimum of 32,000 acres.**

Are management practices designed to achieve a mixture of desired future conditions being applied? (I)

**FY2007 Findings:** Decisions signed in FY2007 include a variety of prescribed treatments. General direction on the Forest has been to concentrate projects within RCW HMAs. As a result, most treatments were limited to mainly longleaf restoration and thinnings.

These planned activities included:

- No acres planned for uneven-age management in FY2007.
- Even-age management using clearcut with reserves to restore longleaf on 75 acres



- Site preparation treatments using a range of methods, including fire, mechanical and herbicide
- Commercial thinning (4,712 acres) to accomplish a mixture of goals including RCW habitat enhancement, longleaf ecosystem enhancement, hardwood enhancement, and forest health/pest prevention.
- Commercial 1<sup>st</sup> thinning on over 3000 acres for forest health/pest prevention.

Prescribed activities in FY2007 continue to move closer to Forest Plan average estimated outputs. Regeneration harvests continue to be far below the anticipated Forest Plan outputs.

**FY2008 Recommended Actions:** Continue to complete field exams and prescriptions to meet Forest Plan goals.

## 9. FORAGE

**Maintain or improve forage resources for domestic livestock grazing on 86,000 acres within designated grazing allotments to meet the needs of local demand.**

Are forage resources being maintained or improved on the designated allotments? (I)

Are active allotments meeting the needs of the local demand for forage resources? (E)

**FY2007 Findings:** A 25-year trend of decreasing demand from the public for grazing resources continues. Only two grazing allotments were actively used for cattle grazing, with numerous permittees taking "non-use". Otherwise, grazing resources are declining in acreage available due to the lack of management and lack of use. Management practices require NEPA documentation prior to being implemented.

A review of the status of the Forest's allotments was conducted in calendar year 2006. Grazing use has declined to three active allotments: Saddle Branch on the Kisatchie District (73 cattle), Tighteye on the Calcasieu District (2 cattle), and Tower on the Calcasieu District (non-use, no cattle).

This review resulted in a proposal to close all range allotments on the Catahoula Ranger District. The Catahoula has 3 range allotments (Clear Creek, Livingston, and Sand Spur), all of which are vacant. The District has not had any range use since 1998. The last permits were issued in 1996 and all three individuals have either waived their grazing permit, or had them cancelled due to non-use. Based on this review, the Forest Supervisor (with authority delegated by the regional Forester, March 2007), closed all range allotments on the Catahoula Ranger District.

**FY2008 Recommended Actions:** Given the continued non-use of the majority of Kisatchie NF allotments, carefully scrutinize future expenditure as to their cost-effectiveness.

## 10. OTHER PRODUCTS

**Make all U.S. minerals available for lease except in areas where consent has been legislatively or administratively withdrawn. Development of federal minerals will be allowed within the constraints of the lease and accompanying stipulations and restrictions. To the extent legally possible, manage surface occupancy to avoid or minimize environmental effects where reserved and outstanding mineral rights exist. As allowed by state and federal law and under the terms of the severance deed, ensure that surface resources will not be adversely affected to an unacceptable degree by the exercise of reserved and outstanding mineral rights.**

Are parcels being made available for lease according to U.S. ownership and management restrictions? Are applications for minerals exploration and development being processed according to directions and in a timely manner? Are operating plans for exploration of private minerals being reviewed for compliance with existing state and federal laws? (I)

**FY2007 Findings:** Parcels were made available for lease according to the latest U.S. ownership (based on court judgments) and management restrictions. The Forest Service continues to offer federal minerals for lease through the BLM Federal Oil and Gas Leasing Program and within the 60 days established by policy when Expressions of Interest are received.

One new well was drilled in 2007 on Outstanding Rights. A 60,000 acre seismic proposal was also initiated. Operating plans for these projects were reviewed for compliance with existing state and federal laws.

Existing operations of private minerals were reviewed for compliance with existing state and federal laws.

All operations including those on federal minerals were also inspected to ensure compliance with state and federal environmental laws.

**FY2008 Recommended Actions:** Continue to improve working relationship with BLM, Eastern States in responding to Expressions of Interest in a timely manner. Work to streamline responses to BLM Expressions of Interest and other leasing questions by upgrading the Minerals database on the Forest. The Forest plans to offer additional acres for leasing in areas showing mineral interest.

**Provide other forest products such as firewood and pinestraw as available, as long as their use does not impair ecosystem health or the achievement of other resource objectives.**

How does management of these products compare with Forest Plan direction? (I)

**FY2007 Findings:** The interest in special wood products from the Forest continues to remain steady. It should be noted that many items, such as firewood, demand exceeds supply. The number of permits issued year to year is about the same, with slight variation. A few more permits were issued on those districts which had suffered storm damage and were in need of the removal of downed material.

**FY2008 Recommended Actions:** None.

Is the Forest providing opportunities for other specialty forest products without negatively impacting forest health or other resources? (V)

**FY2007 Findings:** Low demand for special forest products continued. The majority of permit requests are for personal plant collection which is handled with a FS-2400-8 Forest Products Free Use Permit. There were no known negative impacts on forest health or resources noted.

**FY2008 Recommended Actions:** None.

## 11. HERITAGE RESOURCES

**Manage the nonrenewable heritage resources of the Forest in a spirit of stewardship for the American public. Include the Louisiana State Historic Preservation Officer (SHPO) and interested federally recognized tribes as primary partners in managing the Forest's heritage resources.**

Are significant archeological and historical sites being identified, prior to project decisions, through inventories conducted in consultation with the Louisiana State Historic Preservation Officer (SHPO) according to the National Historic Preservation Act (NHPA), NEPA, and the Southern Regional Heritage Programmatic Agreements (PA)? (I)

**FY2007 Findings:** All compliance reviews and consultations pursuant to Section 106 of the National Historic Preservation Act (NHPA) were completed prior to agency decisions. FY2007 saw a decrease in request for surveys. In FY2007, a total of 19 acres were inventoried. All these acres were in support of timber sales. No new sites were added to the Kisatchie NF heritage database. In FY2007, the Forest continued government-to-government relations with six federally recognized tribal nations. These include the Caddo Tribe of Oklahoma, the Chitimacha Indian Tribe, the Coushatta Indian Tribe, the Jena Band of the Choctaw, the Tunica Biloxi Tribe, and the Choctaw Tribe of Oklahoma. Negotiations are underway for a Memorandum of Understanding with the Caddo Tribe of Oklahoma, the Ozark National Forest, the Ouachita National Forest, the National Forests and Grasslands in Texas and the Kisatchie National Forest. A Programmatic Agreement with the SHPO, the Caddo Tribe of Oklahoma, and the Choctaw Tribe of Oklahoma is nearing the final version.

**FY2008 Recommended Actions:** Continue the current course of pre-decisional inventories and consultations. Continue working with interested tribes to establish required government-to-government relations and partnerships. Complete Programmatic Agreement with the SHPO and Tribes.

**Provide protection for heritage resource sites that preserves the integrity of scientific data that they contain, for the benefit of the public and scientific communities.**

Is law enforcement and heritage support provided at sufficient levels to protect significant heritage sites from internal and/or external activities? (I)

**FY2007 Findings:** Fourteen archaeological sites were revisited to determine the extent of internal or externally caused damage. The Gum Springs Picnic site represents CCC construction, associated with an important national event (New Deal Era), and possesses significance at the state and local level for its association with the CCC in central Louisiana. The Gum Springs Picnic (16WN251) site is considered eligible for nomination to the National Register of Historic Places under Criterion A.

A lake is being constructed as an addition to the Gum Springs Recreation complex on the Winn Ranger District. Ongoing work was monitored by the Forest's archeology staff and the SHPO has visited the site.

External damage (unauthorized site looting) was recorded at least two of the other sites that were visited. No formal Law Enforcement case reports were generated. There are still insufficient funds for Law Enforcement Officers and Heritage Specialists to physically monitor all sites at risk.

**FY2008 Recommended Actions:** Continue current course of physical monitoring. The Forest still needs to request and receive funding to increase monitoring efforts, with an eye towards using remote sensing-technology to supplement physical monitoring.

Are protection measures effective at preventing unacceptable damage? (E)

**FY2007 Findings:** COR's and HRT's are doing an effective job of monitoring projects.

**FY2008 Recommended Actions:** Current strategies for site and buffer zone delineation appear effective and should be continued.

**Reduce the existing backlog of heritage sites needing formal evaluation so that the overall number decreases each year.**

Are sufficient numbers of significant or potentially significant sites being evaluated so that the number of backlogged properties decreases each year? (I)

**FY2007 Findings:** The Forest evaluated one potentially significant heritage site for eligibility to the National Register of Historic Places, and the number of backlogged sites has remained at 452. Given FY2007 funding and staffing levels, we were not able to satisfy compliance with Section 110 of the NHPA, requiring assessments of NRHP eligibility for all known cultural properties.

**FY2008 Recommended Actions:** Continue to request additional funds needed to conduct cultural site evaluations for all sites in backlogged status.

**Enhance and interpret appropriate sites and heritage values to the American public.**

Are sites and heritage values being identified for public interpretation? (I)

**FY2007 Findings:** The Forest Service was a contributor to Louisiana Archaeology Week for the 18th year. Heritage Specialists visited primary and secondary level classrooms to make presentations on Louisiana history and archeological ethics. Additionally, Heritage Specialists made presentations at society meetings promoting the heritage work performed on the Forest. Specialists also taught continuing education to the Louisiana Forest Association. We worked with Louisiana State University to design and install interpretive kiosks at the Old LSU site. This site is listed on the National Register of Historic Places. The Forest and the Calcasieu District have begun to consider interpretation at the Fullerton Mill site. This site is also listed on the National Register of Historic Places.

LSU completed partnership interpretive work on the Old LSU Trail. The trail was officially dedicated.

**FY2008 Recommended Actions:** Continue to offer PIT projects as possible given funding constraints, and remain as a primary partner with the Louisiana SHPO in Louisiana Archaeology Week. Work with partners to interpret the Old LSU site.

Has interpretation enhanced awareness of heritage values among the general public? (E)

**FY2007 Findings:** Public responses from public presentations indicate a general increase in awareness and sensitivity about the nonrenewable cultural resource base. The walking trail with enhanced interpretation has numerous visitors each day.

**FY2008 Recommended Actions:** Continue to offer PIT projects, classroom and civic organization presentations, and partner with the Louisiana SHPO in Louisiana Archeology Week. Interpretation of the Old LSU site does enhance public awareness.

**Provide an ongoing interpretive services program that accurately and adequately develops an interest in and understanding for the natural and cultural environment of the Forest and the mission of the Forest Service in managing it.**

Does the interpretive services program provide usable information to the public about the full scope of forest management practices and philosophy? (I)

**FY2007 Findings:** The full scope of forest management practices and philosophy was incorporated in presentations to the public, schools and media.

Numerous school visits and presentations at events such as Forestry Awareness Week and 4H Achievement Day were made by Recreation staff to increase awareness about recreation and how it is incorporated with other resources such as heritage resources, timber, etc.

**FY2008 Recommended Actions:** Continue to provide funding for high-profile and effective interpretive programs such as Passport in Time, Audubon Zoo Earthfest, Audubon Nature Center Demonstration, Tensas Wildlife Refuge Fire Demonstration, and Outdoor Education Classroom with Louisiana School for the Deaf.

Continue to expand types of audiences reached with educational presentations, such as schools from the larger cities and the Louisiana School for the Deaf. Continue to increase efforts with the LSU Ag Center and 4H groups.

Has interpretive services increased measurable public support of Forest Service resource management goals and objectives? (E)

**FY2008 Recommended Actions:** Continue producing this report annually. Target audience continues to be the Forest line officers, the Regional Forester, and any others who may request a copy of this report or wish to access it over the Internet.

**Evaluate new information and monitoring results; adapt management accordingly.**

Is the Forest Plan being kept current through timely changes as identified in the annual M&E Report? (I)

**FY2007 Findings:** The Forest Plan had its first amendment during FY2003. Amendment #1 to the Plan came about as a result of the ROD for the Supplement to the Final Environmental Impact Statement, Vegetation Management in the Coastal Plain/Piedmont (SEIS)(October 2002). This amendment provided clarification of direction for the preparation of site-specific Biological Evaluations (BEs) including inventory requirements for Proposed, Endangered, Threatened, and Sensitive (PETS) species for the Kisatchie NF. The new amendment made the process of conducting BEs more efficient and consistent throughout the Southern Region and removed/added specific language to Forestwide standard FW-009. In 2007, this first amendment to the Plan was challenged in court. Plaintiffs sought to vacate the regional SEIS direction. If successful, FW-2009 would likely revert to the original 199 standard approved in the 1999 Plan Revision.

Amendment #2 was signed in May, 2003. That amendment, Increased Utilization and Expansion of the Claiborne Air-to-Ground Weapons Range, Louisiana, re-allocated some of the land in the RCW HMA on the Calcasieu RD, Evangeline Unit, and authorized re-issuance of a Special Use Permit to the US Air Force for use of the Claiborne Range.

Amendment #3 (Sandstone Multiple Use Trail Management Plan on the Kisatchie Ranger District) and Amendment #4 (Providing Off Road Vehicle Management on the Calcasieu Ranger District) were begun in FY2004. They were later signed in FY2005.

In October of 2005, Amendment #5 (Recovery Plan Amendment to Kisatchie National Forest Plan) was signed. It added new direction and modified some of the current direction for managing RCW on the Forest.

In April 2006, Amendment #6 (Breezy Hill Trail Project) was signed. It designated approximately 66 miles of single-track, multi-directional (two-way travel) motorized trail in response to user demand and the adverse environmental impacts of unmanaged recreational activities with ORVs on the Catahoula District. Implementation included the allocation of land needed to construct the Breezy Hill Trail corridor from its existing non-designated trail use to motorized use and allocated the areas designated as trailheads to recreational use. Trailhead facilities' construction would occur at a later date, once facility needs and design are determined, and the environmental effects evaluated in separate analyses and decision(s).

Expected in FY2008, Proposed Plan Amendment #7 (Kisatchie National Forest Travel Management Project), would prohibit motorized travel off designated routes Forestwide.

**FY2008 Recommended Actions:** Amend the Plan for any new allocations needed for changing land uses. Begin transitioning from the 1982 Planning Rule and review changes needed for compliance with the expected 2008 Planning Rule as new FSH direction becomes available.

**Benefit from research information, technical assistance and technology development by maintaining a close, continuous working relationship with scientists at the Southern Research Station, academic institutions, and Forest Health Protection units.**

Are cooperative relationships being developed and maintained? (I)

**FY2007 Findings:** The following longleaf pine research studies are managed by SRS-4158 Restoring and Managing Longleaf Pine Ecosystems and continue to be monitored and analyzed:

- Pine Straw Study (#247)
- Longleaf Pine Establishment Study on Upland Pine Sites (#268)
- Longleaf Pine Establishment Study on Wet Sites (#269)
- Comparison Study of Longleaf/Loblolly/Slash Pine Establishment on Upland Pine Sites (#270)
- Comparison Study of Longleaf/Loblolly/Slash Pine Establishment on Wet Pine Sites (#271)
- Study Comparing Management Intensity Levels Used in The Establishment of Longleaf on Upland Pine Sites (#272)
- Study Comparing Management Intensity Levels Used in The Establishment of Longleaf on Wet Pine Sites (#273)
- Delayed Prescribed Burn Study (#275)
- Croker Study Involving The Kisatchie National Forest and the Southern Research Station Units 4158 and 4501 (#3.4)
- Natural Longleaf Pine Burning Study (#3.7)
- Season of Burning Monitoring (#411262)
- Monitoring of Demonstration Areas (#411262)
- Longleaf Pine Ecosystem Restoration Study (#411262)
- Joint Fire Science Program Demonstration Sites (#98-IA-189)

Some of the above studies include cooperative work with the Kisatchie National Forest, Southern Research Station Unit FMR-4158, the Forest Insect Unit FIR-4501, and LSU involving insect attacks on severely burned longleaf pine trees. Other studies are loblolly and longleaf pine plots established by SRS-4158 to monitor changing management practices on growth and yield.

SRS-4704 Utilization of Southern Forest Resources in cooperation with Kisatchie National Forest and Forest Health Protection started plans for a study using biofuels to generate electricity. A BioMax 25 generator is to be erected at the Winn Ranger District that will use carbon products such as wood and paper to produce energy. For more information, visit <http://www.foresthealthprotection.com>

- Longleaf pine restoration techniques
- Management impacts on soil productivity and the resulting longleaf pine ecosystem
- Effectiveness of the Kisatchie National Forest standards and guidelines in reducing non-point source pollution
- Reducing soil loss due to burning on erosive soils particularly the Kisatchie severely eroded soil type

**FY2008 Recommended Actions:** The Kisatchie National Forest should continue to assist the Southern Research Station in ongoing studies. The Forest will help initiate additional studies when requested and as funding allows. Continue to participate in research endeavors targeting quail and deer.

Continue coordination and cooperation efforts with other federal and state agencies, such as the U.S. Department of Interior, Fish & Wildlife Service, the Louisiana Department of Wildlife and Fisheries, the Louisiana Department of Environmental Quality, Louisiana Department of Agriculture and Forestry, and the Louisiana SHPO on issues of mutual concern.

Are coordination and cooperation efforts being conducted with federal and state agencies? (U)

**FY2007 Findings:** Federal and state agencies were consulted as new proposals were developed and underwent the NEPA process. SHPO and THPO (Tribal Historic Preservation Officials) contributed during the preparation and analysis done for EAs. The USFWS and LDWF provided consultation and effects analysis for game and non-game animals potentially affected by project proposals. The Natural Heritage Program (with the LDWF) provided comment on the effects of proposed actions on plants in general, and/or at known locations.

**FY2008 Recommended Actions:** Coordinate with tribal, federal, and state agencies as needed.

Seek to increase the participation of other federal and state agencies, academic institutions, federally recognized Native American tribes, organizations and individuals in the accomplishment of Forest goals and objectives through the use of memorandums of understanding, cooperative agreements, partnerships, and challenge cost share agreements.

Are memorandums of understanding, cooperative agreements, partnerships, and challenge cost share agreements being developed? Are we increasing the participation of groups and individuals in the accomplishment of Forest Plan goals and objectives? (U)

**FY2007 Findings:** The Kisatchie NF and the Louisiana Department of Wildlife and Fisheries cooperate to better manage demand species such as deer. The Kisatchie NF, Louisiana Department of Wildlife and Fisheries, and the USDI Fish and Wildlife Service coordinate Red-Cockaded Woodpecker, Louisiana Pine Snake, and the Louisiana Pearlshell Mussel management activities. Also, Kisatchie NF maintained a Challenge Cost Share Agreement with the National Wild Turkey Federation to enhance wildlife habitat.

The Kisatchie NF continued participation in the Non-point Source Interagency Committee with LDEQ, NRCS, Louisiana Dept. of Forestry and other agencies under the Forest's Memorandum of Agreement (MOA) with the State of Louisiana on Non-Point Source Pollution Control. (Clean Water Act Section 319)

The Kisatchie NF continued to conduct water quality monitoring on 9 streams. The monitoring was done by arrangement with LDEQ under the Forest's Non-Point Pollution Control



Memorandum Of Agreement with the State of Louisiana. The data is incorporated into the State's Clean Water Act Sect. 305b Water Quality Inventory [www.deq.state.la.us/surveillance/wqdata/wqnsites.stm](http://www.deq.state.la.us/surveillance/wqdata/wqnsites.stm). Soil and water staff cooperated with LSU staff to initiate a study of the water quality of three Louisiana pearlshell mussel streams.

The Participating Agreement that the Kisatchie National Forest had with Northwestern State University has expired. The Forest realizes the importance of the agreement and will endeavor to enter into another such agreement as this partnership agreement coordinates one or more graduate level/advanced undergraduate Intern position in NSU's Masters Program in History with Cultural Resource Management emphasis or anthropology program. NSU has a need to provide these Interns with real life experience and training to complement training gained in their academic endeavors while the Forest has need for additional Heritage Resource Management program presence in Natchitoches Parish, specifically the Kisatchie Ranger District and the Winn Ranger District. The Forest will achieve an increased level of compliance with NEPA, Sections 106 and 110 of the National Historic Preservation Act and the Southern Regional PA, while NSU will graduate students in Cultural Resource Management with balanced, marketable skills, and experience in the workplace.

The Kisatchie National Forest also has a Participating Agreement with the Louisiana Division of Archaeology (the Division) in executing Louisiana Archaeology Awareness Week. The Forest and the Division are dedicated to providing educational experiences to the public to establish awareness and understanding. Through such programs as this, the degradation of archeological and historical sites or values on Forest, state, private, and other federal lands in Louisiana, and the data they contain, will diminish.

**FY2008 Recommended Actions:** Continue to accommodate interested partners who wish to form partnerships, cooperative agreements, memorandums of agreements consistent to Forest Plan goals and objectives. The Forest currently has a Draft Programmatic Agreement with the SHPO and Tribes concerning Heritage Resource Management. The Forest should complete this PA in FY2008. The Forest is also in development of a Memorandum of Understanding with the Caddo Tribe of Oklahoma. This too should be complete in FY2008.

Continue to develop Challenge Cost Share agreements. Continue to seek interested partners who wish to participate in implementing the revised Forest Plan.

The Memorandum of Understanding between the Kisatchie NF and the Louisiana Department of Wildlife and Fisheries is over 20 years old and it needs updating. Continue accommodating interested partners who wish to participate in implementing the Kisatchie NF Revised Land and resource Management Plan.

## IV. Evaluation of Outcomes on the Land

This section of the Report evaluates the perceived outcome of the monitoring results for this reporting fiscal year (FY2007). The effectiveness of much of the Plan's direction was more thoroughly evaluated during the Comprehensive Evaluation Report (CER), which began in FY2006 and was completed in FY2007. Based on monitoring results, the following observations were made:

### Biodiversity

- Current decisions are concentrating projects within the RCW HMAs, which will limit shortleaf/hardwood and hardwood-loblolly restoration in the upcoming years. Some species conversion may occur from natural hardwood regeneration.
- Riparian plant communities continue to be maintained in concert with management practices. Typically riparian zones are excluded from silvicultural improvement activities, harvesting, thinning, and mid-story removal activities.
- Thinning prescriptions within RCW HMAs should provide the needed longleaf stand composition.
- Kisatchie NF has a surplus of shortleaf pine/oak-hickory (mid-late stages) and a deficiency of mixed hardwood-loblolly pine (early stages).
- Habitat objectives are being met mainly as a result of the effective Forest prescribed burning program; however, current baseline data and survey methods have not proven effective for analyzing trends in plant indicator species. There is no statistical evidence showing that management objectives have been met.
- Early successional (0-10 years) pine habitat has diminished since the base year 1999; mid-successional pine habitat has stayed approximately the same since 1999; and older successional pine habitats have increased since the base year. For mixed forest types and hardwood forest types, early successional habitat remains approximately the same as the base year; mid-successional habitat remains approximately the same as the base year; and older successional habitats have increased since the base year. Considering all forest types across the Forest, early successional habitat has decreased since the base year; mid-successional habitat remains approximately the same; and late successional habitat has increased since the base year.
- The Forest RCW total indicates an increasing population trend.
- The Louisiana pearlshell mussel populations appeared to be generally stable overall from recent surveys, with both increases and decreases in individual stream numbers. Activities from ORVs, highway construction and urban sprawl continue to threaten the pearlshell's habitat.
- There have been very limited activities planned in old-growth patches.
- No significant changes in acres or site quality of habitat for sensitive and conservation plant species have been found.

### Forest Health

- All areas of the Kisatchie National Forest are in attainment of the National Ambient Air Quality Standards (NAAQS) including those for ozone. Monitoring data for ozone was continuously

collected at the LDEQ air monitoring station located on the Catahoula Ranger District at the Bentley site in Grant Parish until the station was destroyed by fire in August 2005.

- The LDEQ has been monitoring particulate matter with a Federal Reference Method PM 2.5 monitor located in Alexandria (Rapides Parish) since 1999. The monitoring data indicates that the NAAQS for particulates is being met.
- Wildland fire preparedness funding was still below the most efficient level. As a result, wildland fire losses were not being minimized due to the funding shortfall.

### **Watershed Conditions**

- Preliminary findings from the Long Term Soil Productivity Study being conducted by the Southern Research Station indicate that when sites located on several soil types with a severe compaction hazard rating were subjected to experimental compaction, bulk densities recovered to near original undisturbed levels within ten years and pine productivity was unaffected. Also, results indicate that soil productivity may be decreased by slash removal or increased by phosphorus fertilization on phosphorus-deficient sites. In general, less productive sites are more susceptible to detrimental harvesting impacts than highly productive sites. The Long Term Soil Productivity Study is a national study being conducted to evaluate the effects of various timber management practices on the productivity of soil. Research plots are located at various locations around the U. S. including the Catahoula and Calcasieu Ranger Districts.
- The water quality of nine streams on the KNF continued to be monitored quarterly in cooperation with the La. Dept. of Environmental Quality (LDEQ). The measured parameters include suspended solids and turbidity. The monitoring data indicates that all these streams meet the criteria for designated uses, including propagation for fish and wildlife. Almost all samples from these streams have turbidity levels well below 25 nephelometric turbidity units (NTU), which is the criterion for natural and scenic streams. Additional parameters being monitored are metals (arsenic, chromium, cadmium, copper, lead, mercury, and nickel), nutrients (carbon, phosphates, potassium, nitrogen, nitrites, and nitrates) and sulfates. The monitoring data indicate minimal or trace levels of some of these substances but no contamination that would affect fish or wildlife.
- Bi-weekly testing of fecal coliform levels at Stuart Lake, Kincaid Lake and Caney Lake swim beaches indicated that water quality standards for protection of public health and safety were met.
- Water quality on Forest streams was within acceptable norms (LDEQ), and population trends of aquatic MIS suggest that BMPs and SHPZs are adequately protecting the integrity and quality of watersheds within the Forest. Monitoring shows that sediment has not inhibited reproduction of fishes or altered habitat beyond natural conditions.

### **Outdoor Recreation Opportunities**

- Populations of squirrels were stable. Deer populations are and have been considerably below the habitats' carrying capacity; herd densities are too low to provide adequate aesthetic enjoyment for non-consumptive users. Bobwhite population densities are low region-wide.
- Consultations with district staff reveal recent management actions are in compliance the SIOS.

### **Infrastructure**

- All roads were found to be serviceable by the intended user and required no significant increase in the level or frequency of maintenance.

### **Human Influences**

- Timber sales are expected to continue to climb steadily until we begin to achieve the offer/sold levels outlined in the Forest Plan. This should provide positive impact to the parish in terms of local jobs/income.

### **Roadless Area/Wilderness/Wild & Scenic Rivers**

- Work is needed to bring the Kisatchie Hills Wilderness Area into compliance with standards by implementing the strategy that was developed for the Forest.

### **Timber**

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## V. Summary of M&E Recommendations Planned for FY2008

This section of the Report provides information on all monitoring items that need action during the current fiscal year (FY2008). In addition to the specific recommended actions listed below, the general recommendation for FY2008 is to continue implementing the revised Plan using guidance provided in Chapters 2 and 3 of the Plan in order to reach the objectives stated. Long-term goals for the Forest are to reach the Desired Future Conditions (DFC) stated for the Forest and the DFC stated for individual management and sub-management areas. In order to reach our planned goals and objectives, individual project proposals should consider the guidance provided for each management area, use appropriate NEPA procedures to evaluate the site-specific effects of the proposal and alternatives, and reach a decision consistent with Plan direction.

Recommendations for those items that need attention are:

### Biodiversity

- ✓ Strive to accomplish stand exams on 10 percent of the Forest every year and continue preparing environmental documents addressing management practices on as many of these acres as possible. Emphasize longleaf restoration where possible. Forest Silviculturist should continue to field-check samples of implemented project decisions.
- ✓ Strive to increase the number of acres restored to longleaf pine. Continue to monitor sites for additional treatment needs. Thinning prescriptions within RCW HMAs should emphasize the needed longleaf stand composition. Post implementation field checks should be done on thinnings to ensure sufficient longleaf emphasis and evaluate species composition changes and update the FSVeg database for these changes.
- ✓ Continue restoration treatments on shortleaf/hardwood sites where there is high priority for regeneration such as stands damaged by disease, insect or storms as well as those stands showing signs of decline.
- ✓ Mixed hardwood-loblolly forest types exceed long-term desired future conditions by 308,560 acres. Prescribe regeneration cuts on off-site stands where there is a high priority for regeneration such as stands damaged by disease, insect or storms as well as those stands showing signs of decline.
- ✓ Continue to monitor management practices being implemented within streamside and riparian area protection zones for compliance with the Forest Plan, through timber sale contract administration and field checks. Continue to consider selective thinning and hardwood planting treatments within riparian areas to encourage hardwood component.
- ✓ The management indicator species list should be modified to include more commonly occurring native plants that occupy a wider range of forest habitat types. Additionally, the survey protocol needs to be re-examined and possibly revised. It is recommended that successful botany MIS programs from other forests in R8 be considered as models, and that statisticians and vegetation ecologists participate in the review of a new Kisatchie NF MIS protocol. After consultation with Forest planners and the ecosystem conservation team leader, it was decided to delay any MIS survey until the planning changes in the new EMS system are made on Forest.
- ✓ Continue the current prescribed burn program of 100,000 to 130,000 acres per year. Growing season burns are critical for successful gains in our restoration efforts. It is important to increase efforts to remove encroaching woody plants in the Winn District prairies and bogs throughout the Forest, as these habitats host many of our TESC species.
- ✓ Continue increased emphasis on RCW management across the Forest. Identify and prioritize thinning of foraging habitat, improvement and expansion of RCW clusters, and mid-story

removal projects. Work with the USFWS to prioritize future projects and identify habitat needs.

- ✓ Identify all Louisiana pearlshell mussel beds on the Forest, and develop means of monitoring the number of mussels on a recurring basis.
- ✓ Closely monitor RCW populations for signs of stability. Prescribe burn the RCW foraging habitat as much as feasible. Engage in RCW translocations to bolster populations, if feasible. Continue consultations with the USFWS.
- ✓ Continue beaver control, enforcement of Forest Service regulations prohibiting ORVs from riding in streams, and implementation of Best Management Practices (BMPs) and Streamside Habitat Protection Zones (SHPZs) that protect Louisiana pearlshell mussel habitat. Close and monitor areas to ORVs where violations continually occur. Encourage collaboration from other agencies, partners and private landowners to help protect the pearlshell.
- ✓ Document the streamside habitat protection zones and actions taken to manage in and near these areas. Delineate these areas in the stand maps in GIS.
- ✓ The Forest should continue to monitor the weather and take advantage of every burning opportunity. Strive to maximize the implementation of growing season burns on longleaf pine plant community landscapes. The Forest will have two Regional Fuels Helicopters to increase the production and reduce the cost of CWN helicopters.
- ✓ Emphasize burns in the young longleaf plantations to release them from competition and promote extension out of the grass stage. These burns should be in spring or early growing season. Without fire, these young longleaf pine plantations will be lost.

#### **Forest Health**

- ✓ Review burn plans to evaluate how Louisiana Smoke Management Guidelines are being followed during reviews of soil, water and air standards and guidelines (Best Management Practices) and report findings. Develop a protocol to monitor particulate matter concentrations in the air within the sensitive communities adjacent to and within the boundaries of the National Forest before, during, and after prescribed burning operations. The first part would be to model the production, dispersion, and transport of PM<sub>2.5</sub> emissions, and potential impacts of those emissions on local communities. The second part is real-time, localized, particulate matter monitoring using portable samplers. The particulate samplers would be placed at strategic locations within or near smoke sensitive areas identified in the burn plan. Coordinate with the Zone Air Specialist in Arkansas until a protocol is developed, modeling is accomplished, samplers are acquired, and monitoring is implemented.
- ✓ Implement backlog of NEPA covered timber stand improvement treatments, including pre-commercial thinning and first thinnings at an increased rate while the aid of Forest Health funding opportunities are available.
- ✓ Continue to monitor for possible SPB attacks through aerial observations. Field check for increased mortality from Annosus root disease on thinned loblolly stands on high hazard sites.

#### **Outdoor Recreation Opportunities**

- ✓ Establish size and creel limits on the Forest to ensure recruitment and sustainability of the resource. Continue to monitor and collect data.
- ✓ Stock catfish fingerlings when available and necessary. Monitor the success and utilization of the spawning cavities placed in Forest Service lakes. Continue restoration and enhancement projects.

- ✓ Attempt to implement hunting seasons comparable to those of Louisiana Department of Wildlife and Fisheries' Wildlife Management Areas with similar habitat in central and northern Louisiana.
- ✓ Continue the annual update of INFRA data. Continue management of the recreation program using the IWEB INFRA system and the Recreation Realignment Process. Implement the Excellence by Design process for all recreation and trails projects to ensure design compliance, feasibility and good customer service. Continue to improve customer service through the Customer Service Representative.

#### **Human Influences**

- ✓ Increase funding to adequately maintain landlines.
- ✓ Continue emphasis on new communities and capacity-building projects that result in increased local job opportunities and local incomes. Stress environmental concerns for the future. Pursue future program dollars.

#### **Roadless Area/Wilderness/Wild & Scenic River**

- ✓ Continue to update and add information to the new database. Work with District personnel to determine needs and work towards solutions.
- ✓ Strive to manage Kisatchie Hills Wilderness in compliance with the new national Wilderness Meaningful Measures Standards. Continue to promote the area and educate users. Continue working towards bringing the Kisatchie Hills Wilderness Area into compliance with standards by implementing the strategy that was developed for the Forest.

#### **Other Products**

- ✓ Continue to improve working relationship with BLM, Eastern States in responding to Expressions of Interest in a timely manner. Work to streamline responses to BLM Expressions of Interest and other leasing questions by upgrading the Minerals database on the Forest.

#### **Heritage Resources**

- ✓ Continue the current course of pre-decisional heritage resource inventories and consultations. Continue working with interested tribes to establish required government-to-government relations and partnerships. Complete Programmatic Agreement with the SHPO and Tribes.
- ✓ The Forest still needs to request and receive funding to increase heritage resource monitoring efforts, with an eye towards using remote sensing-technology to supplement physical monitoring.
- ✓ Continue to offer PIT projects as possible given funding constraints, and remain as a primary partner with the Louisiana SHPO in Louisiana Archaeology Week. Work with partners to interpret the Old LSU site.
- ✓ Provide increased funding for environmental education projects, printed materials, and video productions. Increase presentations to civic groups, increase participation with non-profit organizations such as Boy Scouts and Girl Scouts; travel to destinations outside Forest boundary to reach various user groups and work with nontraditional audiences. Commitments to the New Orleans Earthfest and the Shreveport State Fair should be renewed.

#### **Evaluation of New Information**

- ✓ Amend the Plan for any new allocations needed for changing land uses. Begin transitioning from the 1982 Planning Rule and review changes needed for compliance with the expected 2008 Planning Rule as new FSH direction becomes available.

- ✓ The Kisatchie National Forest should continue to assist the Southern Research Station in ongoing studies. The Forest will help initiate additional studies when requested and as funding allows. Continue to participate in research endeavors targeting quail and deer.
- ✓ Continue to accommodate interested partners who wish to form partnerships, cooperative agreements, memorandums of agreements consistent to Forest Plan goals and objectives. The Forest currently has a Draft Programmatic Agreement with the SHPO and Tribes concerning Heritage Resource Management. The Forest should complete this PA in FY2008. The Forest is also in development of a Memorandum of Understanding with the Caddo Tribe of Oklahoma. This too should be complete in FY2008.
- ✓ Continue to develop Challenge Cost Share agreements. Continue to seek interested partners who wish to participate in implementing the revised Forest Plan.
- ✓ The Memorandum of Understanding between the Kisatchie NF and the Louisiana Department of Wildlife and Fisheries is over 20 years old and it needs updating.



## **VI. Status of FY2005 Monitoring & Evaluation Report Recommendations**

**Actions Recommended for FY2006:** Every year continue preparing documents addressing management practices, which will be implemented on approximately 10 percent of the Kisatchie National Forest ownership. Forest Silviculturist should continue to field-check samples of implemented project decisions. Include longleaf and RCW thinning to determine forest type changes.

**STATUS in FY2007:** Done.

**Actions Recommended for FY2006:** Continue monitoring sites for additional treatment needs. While acres planted to longleaf is below planned annual average of 1,400 acres longleaf restoration, project decisions with restoration cuts have increased. Project decisions under the Revised Plan are just beginning to be implemented. Thinning prescriptions within RCW HMAs should provide the needed longleaf stand composition. Post implementation field checks should be done on thinnings to ensure sufficient longleaf emphasis and evaluate species composition changes.

Continue restoration treatments on shortleaf/hardwood sites where there is high priority for regeneration such as stands damaged by disease, insect or storm damage.

Mixed hardwood-loblolly forest types exceed long-term desired future conditions by 89%. Prescribe regeneration cuts on off-site stands where there is a high priority for regeneration such as stands damaged by disease, insect or storm damage.

Continue to monitor management practices being implemented within streamside and riparian area protection zones for compliance with the Forest Plan, through timber sale contract administration and field checks. Continue to consider selective thinning treatments within riparian areas to encourage hardwood component.

**STATUS in FY2007:** Done.

**Actions Recommended for FY2006:** The management indicator species list should be modified to include more commonly occurring native plants that occupy a wider range of forest habitat types. Additionally, the survey protocol needs to be re-examined and possibly revised. It is recommended that successful botany MIS programs from other forests in R8 be considered as models, and that statisticians and vegetation ecologists participate in the review of a new KNF MIS protocol. After consultation with Forest planners and the ecosystem conservation team leader, it was decided to delay any MIS survey until the planning changes in the new EMS system are made on Forest, beginning in 2007.

**STATUS in FY2007:** Incomplete. Forest Botanist/Ecologist position is vacant.

**Actions Recommended for FY2006:** As stated above, the management indicator species list should be modified to include more commonly occurring native plants that occupy a wider range of forest habitat types. Additionally, the survey protocol needs to be re-examined and possibly revised. It is recommended that successful botany MIS programs from other forests in R8 be considered as models, and that statisticians and vegetation ecologists participate in the review of a new KNF MIS protocol. After consultation with Forest planners and the ecosystem conservation team leader, it was decided to delay any MIS survey until the planning changes in the new EMS system are made on Forest, beginning in 2007.

**STATUS in FY2007:** Incomplete. Forest Botanist/Ecologist position is vacant.

**Actions Recommended for FY2006:** Continue the current prescribed burn program of 100,000 to 130,000 acres per year. Growing season burns are critical for successful gains in our restoration efforts. It is important to increase efforts to remove encroaching woody plants in the Winn District prairies and bogs throughout the Forest, as these habitats host many of our TESC species.

Continue increased emphasis on RCW management across the Forest. Identify and prioritize thinning of foraging habitat, improvement and expansion of RCW clusters, and mid-story removal projects. Work with the USFWS to prioritize future projects and identify habitat needs. Identify all Louisiana pearlshell mussel beds on the Forest, and develop means of monitoring the number of mussels on a recurring basis.

**STATUS in FY2007:** Done.

**Actions Recommended for FY2006:** Continue the current prescribed burning program of 100,000 to 130,000 acres per year. Growing season burns are critical for successful gains in our restoration efforts. It is important to increase efforts to remove encroaching woody plants in the Winn district prairies and bogs throughout the Forest, as these habitats host many of our TESC species.

Continue to adhere to the land management practices described in the revised Land Management Plan for Kisatchie NF, which calls for relatively older timber stands.

**STATUS in FY2007:** Done.

**Actions Recommended for FY2006:** Closely monitor all populations for signs of stability. Prescribe burn the RCW foraging habitat as much as feasible. Engage in RCW translocations to bolster populations, if feasible. Continue consultations with the USFWS.

**STATUS in FY2007:** Done.

**Actions Recommended for FY2006:** Continue beaver control, enforcement of Forest Service regulations prohibiting ORVs from riding in streams, and implementation of Best Management Practices (BMPs) and Streamside Habitat Protection Zones (SHPZs) that protect Louisiana pearlshell mussel habitat. Close areas to ORVs where violations continually occur. Encourage collaboration from other agencies, partners and private landowners to help protect the pearlshell. Survey and monitor mussel beds on the Catahoula Ranger District to assess the population and identify any potential threats to the pearlshell. Transport resident fishes of pearlshell mussel streams to the FWS Natchitoches fish hatchery for possible host fish identification.

**STATUS in FY2007:** Accomplished.

**Actions Recommended for FY2006:** Continue reviewing all project decisions with management practices within old-growth patches. Conduct sample field reviews after implementation.

**STATUS in FY2007:** None.

**Actions Recommended for FY2006:** During field examination process, review existing designated old growth patches and use old growth attribute scorecard to rank quality.

**STATUS in FY2007:** None.

**Actions Recommended for FY2006:** Every year, conduct silvicultural surveys and prepare documents addressing management practices where needed, on approximately ten percent of the Kisatchie National Forest ownership. Document the streamside habitat protection zones and actions taken to manage in and near these areas.

**STATUS in FY2007:** Done on less than 10% of the Forest due to resource constraints.

**Actions Recommended for FY2006:** The Forest should continue to monitor the weather and take advantage of every burning opportunity. Strive to maximize the implementation of growing season burns on longleaf pine plant community landscapes. The Forest will have two Regional Fuels Helicopters to increase the production and reduce the cost of CWN helicopters.

**STATUS in FY2007:** Done.

**Actions Recommended for FY2006:** Review burn plans evaluating how Louisiana Smoke Management Guidelines are being followed during reviews of soil, water and air standards and guidelines (Best Management Practices) and report findings. Develop a protocol to monitor particulate matter concentrations in the air within the sensitive communities adjacent to and within the boundaries of the National Forest before, during, and after prescribed burning operations. The first part would be to model the production, dispersion, and transport of PM<sub>2.5</sub> emissions, and potential impacts of those emissions on local communities. The second part is real-time, localized, particulate matter monitoring using portable samplers. The particulate samplers would be placed at strategic locations within or near smoke sensitive areas identified in the burn plan. Coordinate with the Zone Air Specialist in Arkansas until a protocol is developed, modeling is accomplished, samplers are acquired, and monitoring is implemented.

**STATUS in FY2007:** Zone Air Coordinator has been contacted to initiate modeling and acquire monitoring equipment.

**Actions Recommended for FY2006:** Continue coordinating with LDEQ Air Quality Dept. on monitoring.

**STATUS in FY2007:** Done.

**Actions Recommended for FY2006:** Continue to request wildland fire preparedness funding at the 100% efficiency level and staff accordingly.

**STATUS in FY2007:** Done.

**Actions Recommended for FY2006:** Manage for productive and healthy forest ecosystems by utilizing prescribed fire to prevent and minimize resource losses to wildland fires.

**STATUS in FY2007:** Ongoing.

**Actions Recommended for FY2006:** Continue identifying restoration and forest health needs through the inventory process.

Implement backlog of NEPA covered timber stand improvement treatments, including pre-commercial thinning and first thinnings at an increased rate while the aid of Forest Health funding opportunities are available.

Continue to monitor areas for shortleaf decline and bug spots through aerial surveillance flights.

**STATUS in FY2007:** Done.

**Actions Recommended for FY2006:** Continue monitoring for possible SPB attacks through aerial observations. Field check for increased mortality from Annosus root disease on thinned loblolly stands on high hazard sites.

**STATUS in FY2007:** Done.

**Actions Recommended for FY2006:** Continue monitoring timber silvicultural management activities for implementation of Standards and Guidelines.

**STATUS in FY2007:** Done.

**Actions Recommended for FY2006:** Continue to restore and revegetate disturbed areas.

**STATUS in FY2007:** Done.

**Actions Recommended for FY2006:** Continue to coordinate with and assist the Southern Research Station with the Long Term Soil Productivity Study.

**STATUS in FY2007:** Done

**Actions Recommended for FY2006:** Continue monitoring prescribed burning and timber management activities for implementation of Standards and Guidelines.

**STATUS in FY2007:** Done.

**Actions Recommended for FY2006:** Continue coordinating with LDEQ on monitoring the water quality of streams on the KNF. Continue required monitoring of water quality of KNF swim beaches.

**STATUS in FY2007:** Done.

**Actions Recommended for FY2006:** Establish size and creel limits on the Forest to ensure recruitment and sustainability of the resource. Continue to monitor and collect data.

Continue to monitor and assess (analyze and interpret data) the effectiveness of management strategies on the Forest concerning aquatic resources.

Continue to monitor and identify any future restoration projects, which may include renovation of older ponds when funds are available.

**STATUS in FY2007:** The structure was repaired on the Longleaf pond, and the Blue Run Pond was completely renovated.

**Actions Recommended for FY2006:** Stock catfish fingerlings when available and necessary. Monitor the success and utilization of the spawning cavities placed in Forest Service lakes.

**STATUS in FY2007:** 4,000 catfish fingerlings were stocked in 2007 in Corney Lake.

**Actions Recommended for FY2006:** Attempt to implement hunting seasons comparable to those of Louisiana Department of Wildlife and Fisheries' Wildlife Management Areas with similar habitat in central and northern Louisiana. Attempt to implement management guidelines concerning the use of free-ranging hunting dogs that are comparable to those of other Louisiana public hunting lands.

**STATUS in FY2007:** Not accomplished; this is a highly contentious and on-going effort.

**Actions Recommended for FY2006:** Continue reviewing proposed projects for SIO compliance.

**STATUS in FY2007:** Ongoing.

**Actions Recommended for FY2006:** Continue to attempt to evaluate the feasibility of developing an automated GIS system that would periodically determine the ROS class eligibility of Forest lands as funding and personnel constraints permit.

**STATUS in FY2007:** No funding.

**Actions Recommended for FY2006:** Continue the annual update of INFRA data. Continue management of the recreation program using the Meaningful Measures system and the Recreation Realignment Process. Continue to improve customer service through the Customer Service Representative.

**STATUS in FY2007:** Done.

**Actions Recommended for FY2006:** Continue use of appropriate design standards for road reconstruction and construction. Continue monitoring road condition and use.

**STATUS in FY2007:** Ongoing.

**Actions Recommended for FY2006:** The Forest is participating in a significant effort with the region to digitize our title records. Continue to manage and monitor the lands program to the level that funding will allow.

**STATUS in FY2007:** Our title files are still in Atlanta and we are awaiting results. Funding reductions may result in reduced levels of monitoring.

**Actions Recommended for FY2006:** Increase funding to adequately cover costs to maintain landlines.

**STATUS in FY2007:** Funding has decreased significantly in land line maintenance with an accompanying reduction in line protected. We are seeing some increase in encroachment.

**Actions Recommended for FY2006:** Continue emphasis on new communities and capacity-building projects that result in increased local job opportunities and local incomes. Stress environmental concerns for the future. Pursue future program dollars.

**STATUS in FY2007:** There was no direction from the Region or the WO.

**Actions Recommended for FY2006:** The Kisatchie National Forest should continue assisting the Southern Research Station in ongoing studies. The Forest should help initiate additional studies when requested and as funding allows.

**STATUS in FY2007:** Done. No new studies initiated.

**Actions Recommended for FY2006:** Strive managing Kisatchie Hills Wilderness in compliance with the new national Wilderness Meaningful Measures Standards. Continue to promote the area and educate users. Work towards bringing the Kisatchie Hills Wilderness Area into compliance with standards by implementing the strategy that was developed for the Forest.

**STATUS in FY2007:** Ongoing.

**Actions Recommended for FY2006:** Continue to systematically increase the sale quantity each year so that the timber sale volume for the first decade of the Plan more closely follows expected outputs.

**STATUS in FY2007:** Volume offered in FY2006: 107,172 CCF; Volume offered in FY2007: 93,642 CCF.

**Actions Recommended for FY2006:** Given the continued non-use of the majority of KNF allotments, carefully scrutinize future expenditure as to their cost-effectiveness.

**STATUS in FY2007:** Done.

**Actions Recommended for FY2006:** Continue improving working relationship with BLM, Eastern States in responding to Expressions of Interest (EOI) in a timely manner. Work to streamline responses to BLM Expressions of Interest and other leasing questions by upgrading the Minerals database on the Forest.

**STATUS in FY2007:** Forest has self-nominated acreage for the first time. New GIS tools make responding to EOI's faster.

**Actions Recommended for FY2006:** Continue the current course of pre-decisional inventories and consultations. Continue working with interested tribes to establish required government-to-government relations and partnerships. Complete Programmatic Agreement with the SHPO and Tribes.

**STATUS in FY2007:** MOU with the Caddo Tribe of Oklahoma has been drafted with hopes that it will be signed in FY2008. The Louisiana Division of Archaeology appointed a new State Archaeologist so the Programmatic Agreement with the SHPO and Tribes continues to be discussed.

**Actions Recommended for FY2006:** Continue current course of physical monitoring. The Forest still needs to request and receive funding to increase monitoring efforts, with an eye towards using remote sensing-technology to supplement physical monitoring.

**STATUS in FY2007:** Two sites were monitored.

**Actions Recommended for FY2006:** Current strategies for site and buffer zone delineation appear effective and should be continued.

**STATUS in FY2007:** Done.

**Actions Recommended for FY2006:** Continue requesting additional funds needed to conduct cultural site evaluations for all sites in backlogged status.

**STATUS in FY2007:** Requested but funding went down.

**Actions Recommended for FY2006:** Continue to offer PIT projects as possible given funding constraints, and remain as a primary partner with the LA SHPO in Louisiana Archaeology Week. Work with partners to interpret the Old LSU site.

Continue to strengthen the relationship between Recreation and Heritage Resources to provide interpretive opportunities between the two resources, such as the continued efforts on the Old LSU Site trail and interpretive area.

**STATUS in FY2007:** The Forest offered one PIT project on the Caney Ranger District in 2006. A Participation agreement was executed with the LA SHPO for Archaeology Week. We worked with LSU and the LASHPO in the development of the interpretation of the Old LSU site.

**Actions Recommended for FY2006:**

**Actions Recommended for FY2006:** Continue producing this report annually. Target audience continues to be the Forest line officers, the Regional Forester, and any others who may request a copy of this report or wish to access it over the Internet.

**STATUS in FY2007:** In FY2006, the FY2005 M&E Report was completed. In FY2007, instead of an annual report the Forest produced its "5-Year Review and Recommendations" report, using a format style meant to dovetail with needs expected for producing a "Comprehensive Evaluation Report" (CER), which is required in the draft FY2008 Planning regulations

**Actions Recommended for FY2006:** Amend the Plan for any new allocations needed for the proposed Breezy Hill Trail Project planned for the Catahoula Ranger District. Continue to add amendments as new direction is needed or new allocations are required for changing land uses. Collect monitoring data from the first half of the planning period and compile it for the 5-Year Review. Begin transitioning from the 1982 Planning Rule and review changes needed for compliance with the 2005 Planning Rule as new FSH direction becomes available.

**STATUS in FY2007:** The Breezy Hill Trail Project decision was signed in April 2006. It became Amendment #6 to the 1999 Forest Plan Revision. In FY2007, proposed Plan Amendment #7 (Kisatchie National Forest Travel Management Project) was further developed with decision expected early in FY2008.

As stated above, the 5-Year Review was completed in FY2007. It utilized changes expected in the then draft Planning regulations (now the 2008 Planning regulations).

**Actions Recommended for FY2006:** The Kisatchie National Forest should continue to assist the Southern Research Station in ongoing studies. The Forest will help initiate additional studies when requested and as funding allows.

Continue to participate in research endeavors targeting quail and deer.

**STATUS in FY2007:** Done. No new projects.

**Actions Recommended for FY2006:** Continue accommodating interested partners who wish to form partnerships, cooperative agreements, memorandums of agreements consistent to Forest Plan goals and objectives. The Forest currently has a Draft Programmatic Agreement with the SHPO and Tribes concerning Heritage Resource Management. The Forest should complete this PA in FY2006.

Continue to develop Challenge Cost Share agreements. Continue to seek interested partners who wish to participate in implementing the revised Forest Plan.

The Memorandum of Understanding between the Kisatchie NF and the Louisiana Department of Wildlife and Fisheries is over 20 years old; therefore, it needs updating. Continue accommodating interested partners who wish to participate in implementing the revised Forest Plan.

**STATUS in FY2007:** The draft Programmatic Agreement was put on hold in 2006 due to the death of the State Archaeologist. A draft Memorandum of Agreement (MOA) was created working with the Caddo Tribe of Oklahoma, the Ozark St. Francis National Forest, the Ouachita National Forest and the National Forests and Grasslands in Texas. This MOA is expected to be signed in 2008.



## Appendix A

<u>Budget Line Item</u>	<u>Plan EBLI</u>	<u>Plan Budget Estimate</u>	<u>FY2007 EBLI</u>	<u>FY2007 Budget</u>	<u>FY2007 Budget Difference</u>
<b>Ecosystem Planning, Inventory, Monitoring</b>					\$ (378,220)
Ecosystem management	NFEM	\$ 819,927	N/A	\$ -	
Inventory and monitoring	***	-	NFIM	345,294	
Land management planning	***	-	NFPN	96,413	
<b>Recreation Use</b>					(87,687)
Recreation management	NFRM	1,128,766	N/A	-	
Wilderness management	NFWM	62,861	N/A	-	
Heritage resources	NFHR	273,309	N/A	-	
Recreation, Heritage, Wilderness	***	-	NFRW	878,334	
Cooperative work - other	CWFS	40,996	CWFS	-	
Trails, Capital Improvements & Mtce.	***	-	CMTL	358,911	
Fee Demo - collection	***	-	FDCL	20,000	
Fee Demo - projects	***	-	FDDS	161,000	

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<u>Budget Line Item</u>	<u>Plan EBLI</u>	<u>Plan Budget Estimate</u>	<u>FY2007 EBLI</u>	<u>FY2007 Budget</u>	<u>FY2007 Budget Difference</u>
<b>Rangeland Management</b>					(533,824)
Range management	NFRG	81,993	NFRG	12,794	
Range vegetation management	NFRV	191,316	N/A	-	
Cooperative work - KV	CWKV	273,309	CWKV	-	
<b>Wildlife and Fish Management</b>					(1,642,503)
Wildlife habitat operations and improvement	NFWL	299,273	N/A	-	
Wildlife and fisheries management	***	-	NFWF	656,328	
Inland fish operations and improvement	NFIF	122,989	N/A	-	
T&E species operations and improvement	NFTE	722,902	N/A	-	
Cooperative work - KV	CWKV	2,428,350	CWKV	719,087	
KV Regional Projects (Special Legislation)	***	-	CWK2	579,720	
Cooperative work – Other/Agreement based	CWFS	34,164	CWFS	10,040	
<b>Forestland Management</b>					(4,852,675)
Timber management	NFTM	3,279,707	NFTM	685,084	
Forest vegetation management	NFFV	582,148	N/A	-	
Vegetation and watershed management	***	-	NFVW	433,569	

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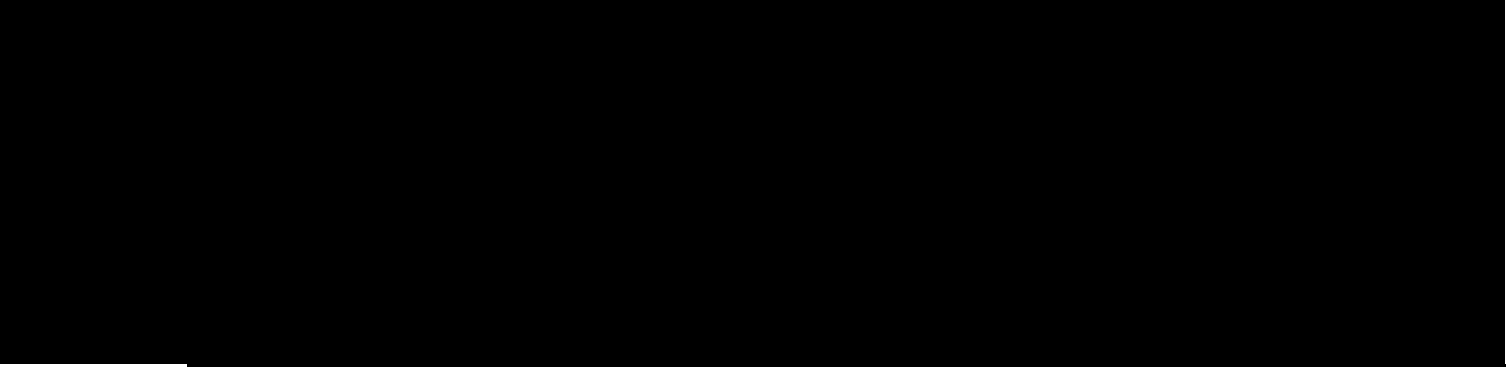
<u>Budget Line Item</u>	<u>Plan EBLI</u>	<u>Plan Budget Estimate</u>	<u>FY2007 EBLI</u>	<u>FY2007 Budget</u>	<u>FY2007 Budget Difference</u>
Reforestation trust fund	RTRT	150,320	RTRT	-	
Cooperative work - KV	CWKV	1,913,162	CWKV	273,031	
KV Regional Projects (Special Legislation)	***	-	CWK2	1,197,750	
Timber roads - purchaser election	PEPE	72,427	PEPE	-	
Timber roads - purchaser construction	PUCR	1,639,853	N/A	-	
Timber salvage sales	SSSS	368,967	SSSS	30,000	
Forest health protection	***	-	SPFH	522,475	
Rehab of burned areas	***	-	NFN3	12,000	
<b>Soil, Water and Air Management</b>					(391,106)
Soil, water, air operations	NFSO	88,825	N/A	-	
Soil and water improvement	NFSI	124,356	N/A	-	
Cooperative work - KV	CWKV	64,323	CWKV	32,838	
KV Regional Projects (Special Legislation)	***	-	CWK2	83,324	
Cooperative work - other	CWFS	273,714	CWFS	-	
Cooperative work – Non-agreement based	***	-	CWF2	43,950	
<b>Minerals and Geology Management</b>					(228,414)

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<u>Budget Line Item</u>	<u>Plan EBLI</u>	<u>Plan Budget Estimate</u>	<u>FY2007 EBLI</u>	<u>FY2007 Budget</u>	<u>FY2007 Budget Difference</u>
Minerals	NFMG	437,942	NFMG	177,528	
Cooperative work – Non-agreement based	***	-			

FY2007 Monitoring & Evaluation Report for Kisatchie National Forest

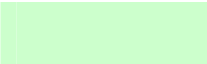
<u>Budget Line Item</u>	<u>Plan EBLI</u>	<u>Plan Budget Estimate</u>	<u>FY2007 EBLI</u>	<u>FY2007 Budget</u>	<u>FY2007 Budget Difference</u>
Forest fuel reduction	WFHF	684,285	WFHF	2,629,476	
Cooperative work - KV	CWKV	-	CWKV	134,592	
<b>Infrastructure Management</b>					1,129,325
Road maintenance and decommissioning	CNRM	1,109,909	CMRD	1,409,046	
Maintenance of facilities	NFFA	279,188	CP09	169,384	
Cooperative work – Non-agreement based	***	-	CWF2	67,000	
Cooperative work – KV (road maintenance)	CWKV	64,323	CWKV	21,514	
KV Regional Projects (Special Legislation)	***	-	CWK2	256,742	
Federal Highway Aquatic Passage	***	-	HTAP	136,000	
Infrastructure improvement and maintenance	***	-	CMII	85,000	
Facilities maintenance	***	-	CMFC	295,168	
Federal highway program	***	-	HTAE	10,820	
Federal Highway Public Roads	***	-	HTRP	3,000	
Operations & maintenance - FS quarters	***	-	QMQM	18,000	
Roads and trails for states (10% Fund)	***	-	TRTR	111,071	
<b>General Administration</b>					361,205



General administration	NFGA	1,716,186	N/A
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FY2007  
Budget

FY2007  
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FY2007 Monitoring & Evaluation Report for Kisatchie National Forest

<u>Budget Line Item</u>	<u>Plan EBLI</u>	<u>Plan Budget Estimate</u>	<u>FY2007 EBLI</u>	<u>FY2007 Budget</u>	<u>FY2007 Budget Difference</u>
<b>Total (in FY2007 dollars)</b>		\$ 25,284,313		17,232,622	\$ (8,051,691)

## Appendix B

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Estimated trend in number of birds observed for Kisatchie National Forest Management Indicator Species at three spatial scales: physiographic stratum and state (BBS data 1991–2003), and Forest (BBS data 1991–2003, Forest data 1998–2003). A "+" indicates a statistically significant increasing trend; "-" a statistically significant decreasing trend; "=" a statistically significant trend was not detected; "=" a statistically significant trend was not detected and the number of routes in the analysis was < 14 (stratum and state trends) or species was observed, on average, at < 5% of points (Kisatchie National Forest trends); "NA" indicates data insufficient to calculate trend estimate (statistical significance set at alpha < 0.10). Note: Red-cockaded woodpecker trends for Forest Data are trends in the total number of active clusters reported for all Kisatchie National Forest Ranger Districts (1990–2003).

Kisatchie National Forest				
Common Name	Upper Coastal Plain	State - Louisiana	BBS Data	Forest Data
Acadian Flycatcher	= =	= =	= =	= =
Bachman's Sparrow	= =	-	-	= =
Cooper's Hawk	= =	=	NA	=
Eastern Wood-pewee	-	= =	= =	-
Hooded Warbler	= =	= =	= =	= =
Kentucky Warbler	= =	-	= =	+
Louisiana Waterthrush	= =	=	=	=



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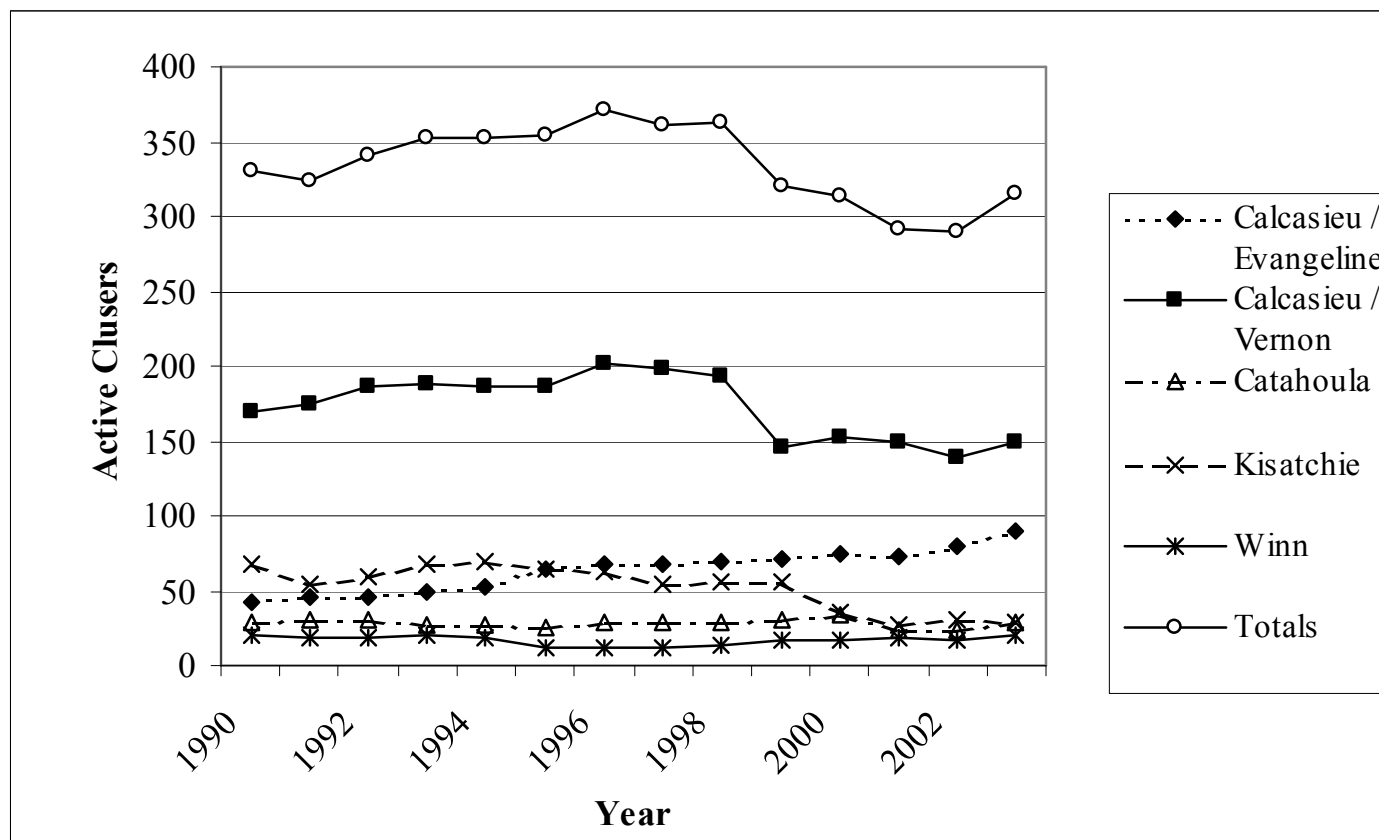
Northern Bobwhite	-	-	-	= =
Northern Parula	= =	= =	=	= =
Pileated Woodpecker	= =	= =	= =	+
Prairie Warbler	= =	-	=	-
Red-cockaded Woodpecker	+	=	=	-
Red-headed Woodpecker	= =	= =	=	= =
Summer Tanager	= =	= =	= =	= =
Warbling Vireo	+	NA	NA	=
White-breasted Nuthatch	= =	NA	NA	=
White-eyed Vireo	= =	-	= =	= =
Wood Thrush	-	= =	-	= =
Worm-eating Warbler	+	-	=	= =
Yellow-billed Cuckoo	-	= =	+	= =

**Number of active Red-cockaded Woodpecker clusters in the Kisatchie National Forest, 1990–2003:**

Ranger District / Population	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Calcasieu / Evangeline	43	46	46	50	52	64	67	68	70	72	75	73	79	89
Calcasieu / Vernon	169	174	186	188	186	187	201	198	194	146	152	149	139	149
Caney <sup>1</sup>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Catahoula	29	31	31	27	27	26	28	29	29	30	34	24	24	28
Kisatchie	68	54	59	67	69	65	63	54	56	56	35	27	30	29
Winn	21	18	18	21	18	12	12	12	14	17	17	18	17	20
<b>Totals</b>	<b>330</b>	<b>323</b>	<b>340</b>	<b>353</b>	<b>352</b>	<b>354</b>	<b>371</b>	<b>361</b>	<b>363</b>	<b>321</b>	<b>313</b>	<b>291</b>	<b>289</b>	<b>315</b>

<sup>1</sup> The Caney population is believed to be extinct with extirpation occurring sometime in the late 1980's.

**Trend in the number of active Red-cockaded Woodpecker clusters in the Kisatchie National Forest 1994–2003:**



Combined, the RCW populations on the Forest have declined slightly at an annual rate of -0.20% over the period 1990 through 2003, resulting in the loss of 15 active clusters (or 4.5% of the combined 1990 populations).

## Appendix C

### Monitoring Trends in MIS

In summary, forest management activities by Kisatchie National Forest do not seem to be negatively impacting lotic systems within the Forest. None of the aquatic management indicator species showed an appreciable decline in relative abundance and all showed the presence of juveniles. If management activities had altered the habitat conditions and disrupted the natural hydrology, an effect should have been evident in at least one of the indicator species. This was not the case.

Graphs of relative abundance over time for the indicator species did show significant variability. A number of factors may have contributed to this variability. The most likely explanation is variability in methodologies or the timing of collections. Because streams in the southeastern United States fluctuate hydrologically, species composition in the spring will differ from the summer when many of the smaller streams become intermittent (Byrd 1994, Williams 2000, Taylor and Warren 2001). Also, different collecting methods vary in their ability to sample aquatic species (Hauer and Lamberti 1996). Additionally, all fish indicator species have a relatively short life span (four years or less); thus, they will have high turnover in age-classes over time, which could also partially account for the high variability. Nonetheless, fish populations appear to be viable and sustainable in the protected habitats and refuges of KNF.

Although numbers of largemouth bass and sunfish in KNF are not indicative of eutrophic systems, viable populations do exist for a sustainable sport fishery. The nutrient cycle in oligotrophic systems occasionally produces an influx of nutrients over the short term, but cannot maintain a high level of production every year. Therefore, Forest-wide trends of largemouth bass and sunfish may fluctuate, but this is due to natural variability. Thus, where economically feasible, the Forest Service initiates restoration and enhancement projects.

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<sup>9</sup> NOTE: This appendix contains only a small excerpt from the full 2004 MIS Report for the KNF.

## Appendix D

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<u>Name</u>	<u>Title</u>
Cynthia Dancak	Team Leader – Engineering/Timber/GIS
Ed Bratcher	Team Leader – Fire, Lands, Minerals, Safety
(Vacant)	Team Leader – Ecosystem Conservation/Planning
Jim Caldwell	Public Affairs/Recreation/Heritage Resources
Carl Brevelle	Forester/Resource Planner
Deberoah Collins	Budget Officer
Velicia Bergstrom	Forest Archeologist
Shanna Ellis	Forest Recreation Program Manager
Holly Morgan	Forester/Timber Sales Specialist
Lester Tisino	Fire Management Officer
Ken Dancak	Forest Wildlife Biologist
Bruce Prudhomme	Forest Hydrologist
Jackie Duncan	Forest Silviculturist
(Vacant)	Forest Botanist/Ecologist
David Byrd	Forest Fisheries Biologist
Charlie Crothers	Lands Program Manager
Jim Pace	Sup. Civil Engineer
Tim Haley	Entomologist, Forest Health Protection